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INTERIM THERMODYNAMIC PROPERTIES FOR GASEOUS AND LIQUID OXYGEN AT TEMPERATURES FROM 55 TO 300°K AND PRESSURES TO 300 ATM

by

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Interim values of internal energy, entropy, enthalpy, and density of oxygen are tabulated as functions of pressure and temperature from 55 to 300°K and 0.1 to 300 atmospheres. These values have been calculated using a modified BWR equation of state fitted to experimental liquid data and calculated gaseous data. The gaseous data were calculated using the theory of corresponding states with nitrogen as the model.

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Introduction

The recent publication on new measurements of the density of liquid oxygen [Van Itterbeek and Verbeke, 1960 and 1961; Timrot and Borisoglebskii, 1960 and 1961] has made possible the extension of thermodynamic property charts and tables into the liquid region. The Data Evaluation Unit of the Cryogenic Data Center has been studying and evaluating these new data with the objective of issuing new property tabulations and graphs. This task is still in progress and final evaluations and comparisons with experimental data from many sources will not be completed for several months. However, sufficient progress has been made so that a selection of the "best values" of the more significant P-V-T data has been accomplished and these selected data have been represented by two equations of state. Because of the increased demand for these data, it seems prudent, at this time, to issue an interim table of values based on these equations of state, a vapor pressure representation and the ideal gas specific heat values from spectroscopic data. It is intended that this tabulation will be superseded by an NBS Technical Note when final evaluations and comparisons have been completed. However, it is anticipated that the present values will remain essentially unchanged. This later publication will report more completely the processes of evaluation, and estimates of data uncertainty, and present comparisons of the results with experimental data.

Published P-V-T data at ambient and low temperatures.

As a preliminary to this work a bibliography of the thermo-
physical properties of oxygen was compiled [Hust et al, 1962]. This
bibliography includes both the references on the P-V-T and thermo-
dynamic data, and the references on transport and other thermo-
physical properties. Although some of the following references came
to our attention subsequent to publication, this bibliography [Hust et al,
1962] outlines the primary literature search for this task.

The experimental P-V-T data considered in this study are
listed below. The gaseous data included are:

1. the 27 points by Holborn and Otto [1922] along isotherms
   of 0°C, 50°C, and 100°C and pressures from 25 to 100
   atmospheres,

2. the 50 points by Kuypers and Onnes [1923] along isotherms
   of 0 and 20°C and pressures from 21 to 62 atmospheres,

3. the 75 points by Onnes and Kuypers [1924] along nine
   isotherms from -117 to 20°C and pressures from 20 to
   62 atmospheres (5 values reported near 50 atm. appeared
   to be erroneous and were not considered),

4. the 31 points by van Urk and Nijhoff [1924] along isotherms
   at 0°C, 15.6°C, and 20°C and pressures from 34 to 66
   atmospheres, and

5. the 43 points by Nijhoff and Keesom [1925] along twelve
   isotherms from -152 to -40°C and pressures from 3 to
   9 atmospheres.

The liquid P-V-T data considered are:

6. the 68 points by van Itterbeek and Verbeke [1960] along
   5 isotherms from 65 to 90°K and pressures from 2 to
   149 kg/cm^2,

7. the 15 points by van Itterbeek and Verbeke [1961] along isotherms at 77.35°K and 90.07°K and pressures from 98 to 874 kg/cm^2, and

8. the table of smoothed values by Timrot and Borisoglebskii [1961] which included 15 isotherms from -190 to -120°C and 20 isobars from 10 to 200 kg/cm^2. (The experimental data are only illustrated graphically and indicate 5 data points which were measured near -194°C with pressures extending to 250 kg/cm^2; two points are indicated near -181°C, one near saturation and one near 75 atmospheres. The remaining data points are in the range -161 to -115°C with pressures from saturation to 250 kg/cm^2. These data include ten measurements at or near saturation for which the experimental values are available in a separate publication [Timrot and Borisoglebskii, 1960].)

The vapor pressure data from the triple point to the critical point were taken from:

9. the publication by Hoge [1950].

The triple point density considered here is from:

10. Mullins, Ziegler and Kirk [1962].

Saturated liquid density data considered were the experimental data from the following sources:

11. the 12 points by Baly and Donnan [1902] from 69° to 89°K,

12. the 2 measured densities by Blitz, Fischer and Wunnenberg [1930],

13. the 15 values by Germann [1913],

14. the 7 points by Mathias and Onnes [1911], and

15. the 10 values by Timrot and Borisoglebskii [1960].

The only saturated vapor density data available are:

    16. the 7 values reported by Mathias and Onnes [1911].

Some of the earlier compilations of thermodynamic data for oxygen have also been compared to the results of the tables presented here.

These compilations include:

    a. the work by Millar and Sullivan [1928],

    b. the comprehensive study by Hilsenrath et al. [1955],

    c. the P-H chart issued by Keesom, Bijl and van Ierland [1955], and

    d. the recent study of low pressure properties by Mullins, Ziegler and Kirk [1962].

The selection of P-V-T data and their representation by an equation of state.

Prior to the publication of the new liquid density data [Van Itterbeek and Verbeke, 1960 and 1961; Timrot and Borisoglebskii, 1960 and 1961] no significant experimental density data for oxygen for low temperatures were reported for almost 40 years. With the exception of some data at saturation, these older data were for the gaseous phase and were restricted to a pressure range from 3 to 60 atmospheres. In the interim, many tabulations and charts of oxygen properties have been based on these data and on values deduced by the law of corresponding states using nitrogen as a model. The new data, not considered in previous compilations, are the measurements reported by van Itterbeek and Verbeke [1960 and 1961] and by Timrot and Borisoglebskii [1960 and 1961].

It should be noted that the new liquid density data from these two independent sources [van Itterbeek and Verbeke, 1960; Timrot

and Borisoglebskii, 1961] are in disagreement by as much as 0.6%
in the temperature range common to both sets of data. On examina-
tion of a graph presented by Timrot which illustrates this data
[Timrot and Borisoglebskii, 1961], however, it has been observed
that only 7 of their measurements were made in the temperature
interval (79 to 93°K) covered by van Itterbeek. The remaining data
by Timrot included 177 values in the interval 112 to 158°K. With
the exception of the saturated liquid densities presented in another
paper [Timrot and Borisoglebskii, 1960], Timrot presents only a
table of smoothed numerical values so that no evaluation can be made
of the individual measurements for the subcooled liquid. In the present
compilation, the liquid density values below 112°K reported by Timrot
have therefore not been included, resulting in an apparent consistency
between Timrot's data from 112 to 148°K and van Itterbeek's data
from 56 to 90°K. The average deviation of these selected experimental
data below 300 atm from the P-V-T representations given below is
0.07% in density. The maximum deviation is 1.6% near the critical
point. No firm basis has been established for eliminating Timrot's
low temperature values other than the scarcity of their measurements
in this range, and the implication that their subsequent extrapolation
to lower temperatures is not supported by van Itterbeek's measure-
ments.

The quantity and range of reported P-V-T data for oxygen vapor
is inadequate for providing a sufficiently definitive surface for fitting
to an equation of state over a broad range of temperature and pressure.
Therefore, in this compilation, the vapor P-V-T surface was estab-
lished by the theory of corresponding states, using nitrogen as a
model. Experimental nitrogen data are available over the correspond-
ing range of pressure and temperature being considered for the oxygen

property tabulation. It was also determined, however, that these corresponding states values were in agreement with the available experimental oxygen data. The average deviation of the experimental vapor data from the P-V-T representation given below is 0.6%. This average deviation is affected significantly by the points in the vicinity of the critical point where the deviations are as high as 14%.

The vapor pressure data selected for this compilation are taken from Hoge [1950]. These data are represented by equation (1). The average deviation of the values compiled by Hoge from the calculated data is 0.2%.

$$\log_e P = AT^2 + BT + C + D \log_e T + E/T \qquad (1)$$

The coefficients for equation (1), listed in Table I, were determined by minimizing the sums of the squared differences in $\log_e P$.

TABLE I. Coefficients for the Vapor Pressure Equation (1)
(P is in atmospheres and T in °K)

$A = 0.13750055 \times 10^{-3}$ $\qquad$ $C = 6.6564191$

$B = -0.054998814$ $\qquad$ $D = 1.7023470$

$\qquad\qquad\qquad\qquad\qquad$ $E = -945.12173$

The equation of state used to represent the P-V-T surface was a Benedict-Webb-Rubin equation, modified by Strobridge [1962] to obtain a better fit to nitrogen data at high densities. This equation of state is

$$P = RT\rho + (Rn_1 T + n_2 + n_3/T + n_4/T^2 + n_5/T^4) \rho^2 + (Rn_6 T + n_7) \rho^3$$

$$+ n_8 T\rho^4 + \rho^3 (n_9/T^2 + n_{10}/T^3 + n_{11}/T^4) e^{-n_{16}\rho^2}$$

$$+ \rho^5 (n_{12}/T^2 + n_{13}/T^3 + n_{14}/T^4) e^{-n_{16}\rho^2} + n_{15}\rho^6 . \qquad (2)$$

The coefficients for equation (2) were obtained by a least squares fit to the liquid and vapor data outlined above. These coefficients are listed in Table II.

TABLE II. Coefficients for the Equation of State (2) for Oxygen Vapor from 55 to 300°K and Liquid above 85°K. (P in atmospheres, ρ in g-moles/liter and T in °K)

$n_1 = 0.36684115 \times 10^{-1}$ $n_9 = 0.12473562 \times 10^4$

$n_2 = -0.10091340 \times 10^1$ $n_{10} = -0.61007363 \times 10^5$

$n_3 = -0.59581958 \times 10^2$ $n_{11} = -0.46185178 \times 10^7$

$n_4 = -0.39091633 \times 10^4$ $n_{12} = -0.10379526 \times 10^1$

$n_5 = 0.12405065 \times 10^8$ $n_{13} = 0.66183734 \times 10^3$

$n_6 = 0.87258515 \times 10^{-3}$ $n_{14} = -0.22051320 \times 10^5$

$n_7 = -0.11885929 \times 10^{-1}$ $n_{15} = 0.73071820 \times 10^{-6}$

$n_8 = 0.29165708 \times 10^{-5}$ $n_{16} = 0.37656816 \times 10^{-2}$

(The value of R used with equation (2) was 0.0820797 liter-atm/g-mole °K.)

The differences between values calculated with these coefficients and the experimental data become larger with decreasing temperature in the liquid region reaching a maximum of 1.4% in density at 64°K. For this reason another equation of state (3), suggested by van Itterbeek and Verbeke [1960], was used to represent the liquid data below 85°K. At 85°K and below 150 atm equations (2) and (3) agree within ± 0.05% in density. The coefficients for equation (3) listed in Table III were taken from van Itterbeek and Verbeke [1960].

$$\rho = a_1 + a_2 T + a_3 T^2 + (a_4 + a_5 T)P \qquad (3)$$

TABLE III. Coefficients for the Equation of State (3) of Liquid Oxygen below 85°K.
(P in atmospheres, ρ in g-moles/liter, and T in °K)

$a_1 = 0.48926 \times 10^2$ $a_4 = -0.17219 \times 10^{-2}$

$a_2 = -0.15300$ $a_5 = 0.91185 \times 10^{-4}$

$a_3 = 0.66752 \times 10^{-4}$

As is generally the case with equations of state, the calculation of pressures in the liquid range should be done with caution. Although density determinations by these equations may be quite good, large errors in pressure may occur.

The selected densities for saturated liquid and saturated vapor were obtained by the simultaneous solution of the vapor pressure equation (1) and the equation of state (2) or (3) as appropriate. The saturated liquid densities obtained are essentially in agreement with the experimental data [Baly and Donnan, 1902; Mathias and Onnes, 1911; Blitz et al, 1930; Timrot and Borisoglebskii, 1960] with an average deviation of 0.2% excluding 4 points near critical with an average deviation of 2.1%. The calculated saturated vapor densities do not agree well with experimental data, the average deviation being 5.0%. However, the experimental uncertainties in the latter data may be as large as the differences observed.

The Calculation of Thermodynamic Properties.

The entropy, enthalpy, and internal energy of the gas phase, including saturated vapor, were calculated with equations (4), (5), and (6) respectively, with the derivaties $(\partial P/\partial T)_\rho$ from equation (2).

$$S(T, \rho) = S_{T_o}^o + \int_{T_o}^{T} C_p^o \frac{dT}{T} - R \ln (RT\rho) + \int_0^\rho \left[\frac{R}{\rho} - \frac{1}{\rho^2} \left(\frac{\partial P}{\partial T} \right)_\rho \right]_T d\rho \quad (4)$$

8

$$H(T, \rho) = H_{T_o}^o + \int_{T_o}^{T} C_p^o \, dT + (Z - 1)RT + \int_{0}^{\rho} \left[\frac{P}{\rho^2} - \frac{T}{\rho^2} \left(\frac{\partial P}{\partial T} \right)_\rho \right]_T d\rho \quad (5)$$

$$U(T, \rho) = H(T, \rho) - P/\rho \quad (6)$$

The reference entropy of the ideal gas at $T_o = 90°K$ and 1 atm, $S_{T_o}^o = 5.3191345$ joule/g $°K$, was obtained from Hilsenrath et al [1955]. The reference enthalpy of the ideal gas at $T_o = 90°K$, $H_{T_o}^o = 356.42$ joule/g, was obtained from the values of $H^o - E_o^o$ listed by Hilsenrath et al [1955] by taking E_o^o to be 274.83 joule/g. This value of E_o^o was selected to make the enthalpy of the saturated liquid at the normal boiling point essentially the same as that of Mullins, Ziegler, and Kirk [1962]. Exact agreement was not obtained since the normal boiling temperature predicted by equation (1) (90.198°K) is slightly different from the value presented by Mullins, Ziegler, and Kirk [1962] (90.168°K).

The zero pressure specific heat, C_p^o, as tabulated by Hilsenrath et al. [1955], was represented by equation (6) between 55 and 300°K with an average deviation of 0.005% and a maximum deviation of 0.01%.

$$C_p^o = A + BT + CT^2 + DT^3 + ET^4 \quad (7)$$

Coefficients for (7) are given in Table IV.

TABLE IV. Coefficients for the Zero Pressure Specific Heat Equation (7).
(C_p^o is in joules/g $°K$, T in $°K$)

A = 3.5043099   D = -0.58262431 x 10^{-8}

B = -0.68438341 x 10^{-4} E = 0.16619840 x 10^{-10}

C = 0.81799927 x 10^{-6}

The saturated liquid entropies and enthalpies were determined by subtracting the entropy and enthalpy changes due to vaporization as given by Clapeyron's equation (8) from the saturated vapor values.

$$\Delta H = T \Delta S = T \frac{dP}{dT} \Delta V \text{ (vaporization)} \qquad (8)$$

The difference between the volume of the vapor and the liquid at saturation is designated by ΔV. These volumes were determined by the simultaneous solution of the vapor pressure equation (1) and the applicable equation of state (2) or (3). The slope of the vapor pressure curve dP/dT was obtained from equation (1).

The liquid entropies and enthalpies were determined by calculating the isothermal changes from saturated liquid states with equations (9) and (10), respectively, with the derivative $(\partial P / \partial T)_\rho$ obtained from equation (2) for isotherms at and above 85° K and from equation (3) at isotherms below 85° K.

$$\Delta S = \int_{\rho_{sat}}^{\rho} \left[-\frac{1}{\rho^2} \left(\frac{\partial P}{\partial T} \right)_\rho \right] d\rho \qquad (9)$$

$$\Delta H = \frac{P}{\rho} - \left(\frac{P}{\rho} \right)_{sat} + \int_{\rho_{sat}}^{\rho} \left[\frac{P}{\rho^2} - \frac{T}{\rho^2} \left(\frac{\partial P}{\partial T} \right)_\rho \right] d\rho \qquad (10)$$

Comparisons of property values at 85° K as calculated by equation (2) with those calculated by equation (3) reveal maximum differences of 0.0006 g/cm^3, 0.002 joule/g °K, and 0.2 joule/g for values of density, entropy, and enthalpy, respectively, for pressures to 150 atmospheres.

It has been noted in these calculations that the derived property surface contains a discontinuity at critical temperature and above critical pressure. This discontinuity is probably due to small errors in predicting the entropy and enthalpy of vaporization and has been removed by making corrections to the vaporization values as indicated in Table V.

The number of significant figures given in the tables is not justified on the basis of the uncertainties of the data, but is presented to maintain internal consistency. The tabulated data below 85°K, where equation (3) was used have been limited to pressures below 150 atm. Equation (3) has been demonstrated as sufficiently accurate in this pressure range. However, later measurements by van Itterbeek and Verbeke [1961] demonstrate that equation (3) is not adequate at higher pressures.

TABLE V. Corrections for Entropy and Enthalpy of Vaporization

Temperature	Entropy of Vaporization joules/g °K		Enthalpy of Vaporization joules/g	
	Calculated*	Correction	Calculated*	Correction
154	0.3203	0.0072	49.35	1.12
153	0.3939	0.0067	60.27	1.03
152	0.4549	0.0062	69.15	0.94
151	0.5082	0.0057	76.74	0.86
150	0.5561	0.0052	83.42	0.78
149	0.6001	0.0047	89.40	0.69
148	0.6408	0.0041	94.85	0.61
147	0.6793	0.0036	99.85	0.53
146	0.7157	0.0031	104.48	0.45
145	0.7504	0.0026	108.81	0.38
144	0.7837	0.0021	112.85	0.30
143	0.8158	0.0016	116.66	0.22
142	0.8468	0.0010	120.26	0.15
141	0.8771	0.0005	123.67	0.07

*The corrections have been added to the calculated values for vaporization.

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0.10 ATMOSPHERE ISOBAR

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
					91	0.4297	357.14	333.56	5.9263
					92	0.4250	358.05	334.21	5.9363
					93	0.4204	358.96	334.86	5.9462
					94	0.4159	359.87	335.51	5.9559
					95	0.4115	360.79	336.16	5.9656
					96	0.4072	361.70	336.81	5.9751
					97	0.4029	362.61	337.47	5.9846
					98	0.3988	363.52	338.12	5.9939
					99	0.3947	364.44	338.77	6.0032
					100	0.3908	365.35	339.42	6.0124
					101	0.3869	366.26	340.07	6.0215
					102	0.3831	367.17	340.72	6.0304
					103	0.3793	368.09	341.37	6.0393
					104	0.3757	369.00	342.02	6.0482
					105	0.3721	369.91	342.68	6.0569
					106	0.3685	370.82	343.33	6.0655
					107	0.3651	371.73	343.98	6.0741
					108	0.3617	372.65	344.63	6.0826
					109	0.3583	373.56	345.28	6.0910
					110	0.3551	374.47	345.93	6.0993
					111	0.3518	375.38	346.58	6.1076
					112	0.3487	376.29	347.23	6.1157
					113	0.3456	377.21	347.89	6.1238
					114	0.3425	378.12	348.54	6.1319
					115	0.3395	379.03	349.19	6.1398
					116	0.3366	379.94	349.84	6.1477
					117	0.3337	380.85	350.49	6.1556
					118	0.3309	381.76	351.14	6.1633
					119	0.3281	382.68	351.79	6.1710
					120	0.3253	383.59	352.44	6.1786
					121	0.3226	384.50	353.09	6.1862
					122	0.3200	385.41	353.74	6.1937
					123	0.3174	386.32	354.39	6.2011
					124	0.3148	387.23	355.05	6.2085
55	1302.8	85.991	85.983	2.1743	125	0.3123	388.14	355.70	6.2158
56	1298.1	87.397	87.389	2.1996	126	0.3098	389.05	356.35	6.2231
57	1293.5	88.809	88.801	2.2246	127	0.3073	389.97	357.00	6.2303
58	1288.8	90.229	90.221	2.2493	128	0.3049	390.88	357.65	6.2374
59	1284.2	91.657	91.649	2.2737	129	0.3026	391.79	358.30	6.2445
60	1279.5	93.092	93.084	2.2979	130	0.3002	392.70	358.95	6.2516
61	1274.9	94.534	94.526	2.3217	131	0.2979	393.61	359.60	6.2586
62	1270.3	95.984	95.976	2.3453	132	0.2957	394.52	360.25	6.2655
63	1265.6	97.442	97.434	2.3686	133	0.2934	395.43	360.90	6.2724
64	1261.0	98.908	98.900	2.3917	134	0.2912	396.34	361.55	6.2792
65	1256.4	100.38	100.37	2.4146	135	0.2891	397.25	362.20	6.2860
66	1251.8	101.86	101.86	2.4372	136	0.2869	398.17	362.85	6.2927
67	1247.2	103.36	103.35	2.4596	137	0.2848	399.08	363.50	6.2994
68	1242.6	104.86	104.85	2.4818	138	0.2828	399.99	364.15	6.3060
69	1238.0	106.37	106.36	2.5039	139	0.2807	400.90	364.80	6.3126
70	1233.4	107.89	107.88	2.5257	140	0.2787	401.81	365.46	6.3191
71	1228.8	109.41	109.41	2.5474					
72	1224.2	110.95	110.94	2.5689	141	0.2767	402.72	366.11	6.3256
• 72.797	1220.5	109.55	109.54	2.5761	142	0.2748	403.63	366.76	6.3320
• 72.797	0.5384	340.52	321.70	5.7226	143	0.2729	404.54	367.41	6.3384
73	0.5369	340.71	321.84	5.7252	144	0.2710	405.45	368.06	6.3447
74	0.5296	341.62	322.49	5.7376	145	0.2691	406.36	368.71	6.3510
75	0.5224	342.53	323.14	5.7498	146	0.2672	407.27	369.36	6.3573
76	0.5155	343.45	323.79	5.7619	147	0.2654	408.19	370.01	6.3635
77	0.5087	344.36	324.44	5.7738	148	0.2636	409.10	370.66	6.3697
78	0.5021	345.27	325.09	5.7856	149	0.2618	410.01	371.31	6.3758
79	0.4957	346.18	325.74	5.7972	150	0.2601	410.92	371.96	6.3819
80	0.4894	347.10	326.39	5.8087					
81	0.4833	348.01	327.04	5.8201	151	0.2584	411.83	372.61	6.3880
82	0.4773	348.92	327.69	5.8313	152	0.2567	412.74	373.26	6.3940
83	0.4715	349.83	328.35	5.8423	153	0.2550	413.65	373.91	6.4000
84	0.4659	350.75	329.00	5.8533	154	0.2533	414.56	374.56	6.4059
85	0.4603	351.66	329.65	5.8641	155	0.2517	415.47	375.21	6.4118
86	0.4549	352.57	330.30	5.8747	156	0.2501	416.38	375.86	6.4176
87	0.4496	353.49	330.95	5.8853	157	0.2485	417.29	376.51	6.4235
88	0.4445	354.40	331.60	5.8957	158	0.2469	418.20	377.16	6.4292
89	0.4395	355.31	332.25	5.9060	159	0.2453	419.11	377.81	6.4350
90	0.4345	356.22	332.91	5.9162	160	0.2438	420.02	378.46	6.4407

• PHASE CHANGE

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
161	0.2423	420.93	379.11	6.4464	231	0.1688	484.69	424.66	6.7752
162	0.2408	421.84	379.76	6.4520	232	0.1681	485.60	425.31	6.7791
163	0.2393	422.76	380.41	6.4576	233	0.1674	486.51	425.97	6.7830
164	0.2379	423.67	381.07	6.4632	234	0.1666	487.43	426.62	6.7869
165	0.2364	424.58	381.72	6.4687	235	0.1659	488.34	427.27	6.7908
166	0.2350	425.49	382.37	6.4742	236	0.1652	489.25	427.92	6.7947
167	0.2336	426.40	383.02	6.4797	237	0.1645	490.16	428.57	6.7986
168	0.2322	427.31	383.67	6.4851	238	0.1638	491.07	429.23	6.8024
169	0.2308	428.22	384.32	6.4905	239	0.1631	491.99	429.88	6.8062
170	0.2294	429.13	384.97	6.4959	240	0.1625	492.90	430.53	6.8100
171	0.2281	430.04	385.62	6.5012	241	0.1618	493.81	431.18	6.8138
172	0.2268	430.95	386.27	6.5065	242	0.1611	494.72	431.83	6.8176
173	0.2255	431.86	386.92	6.5118	243	0.1605	495.63	432.49	6.8214
174	0.2242	432.77	387.57	6.5171	244	0.1598	496.55	433.14	6.8251
175	0.2229	433.68	388.22	6.5223	245	0.1592	497.46	433.79	6.8288
176	0.2216	434.59	388.87	6.5275	246	0.1585	498.37	434.44	6.8326
177	0.2204	435.50	389.52	6.5326	247	0.1579	499.28	435.10	6.8363
178	0.2191	436.41	390.17	6.5378	248	0.1572	500.20	435.75	6.8399
179	0.2179	437.32	390.82	6.5429	249	0.1566	501.11	436.40	6.8436
180	0.2167	438.23	391.47	6.5479	250	0.1560	502.02	437.05	6.8473
181	0.2155	439.14	392.12	6.5530	251	0.1553	502.94	437.71	6.8509
182	0.2143	440.05	392.77	6.5580	252	0.1547	503.85	438.36	6.8545
183	0.2131	440.97	393.42	6.5630	253	0.1541	504.76	439.01	6.8582
184	0.2120	441.88	394.07	6.5679	254	0.1535	505.67	439.67	6.8618
185	0.2108	442.79	394.72	6.5729	255	0.1529	506.59	440.32	6.8654
186	0.2097	443.70	395.37	6.5778	256	0.1523	507.50	440.97	6.8689
187	0.2086	444.61	396.02	6.5827	257	0.1517	508.41	441.63	6.8725
188	0.2074	445.52	396.67	6.5875	258	0.1511	509.33	442.28	6.8760
189	0.2064	446.43	397.32	6.5924	259	0.1505	510.24	442.93	6.8796
190	0.2053	447.34	397.97	6.5972	260	0.1500	511.15	443.59	6.8831
191	0.2042	448.25	398.62	6.6019	261	0.1494	512.07	444.24	6.8866
192	0.2031	449.16	399.28	6.6067	262	0.1488	512.98	444.89	6.8901
193	0.2021	450.07	399.93	6.6114	263	0.1483	513.90	445.55	6.8936
194	0.2010	450.98	400.58	6.6161	264	0.1477	514.81	446.20	6.8970
195	0.2000	451.89	401.23	6.6208	265	0.1471	515.72	446.86	6.9005
196	0.1990	452.80	401.88	6.6255	266	0.1466	516.64	447.51	6.9039
197	0.1980	453.71	402.53	6.6301	267	0.1460	517.55	448.16	6.9074
198	0.1970	454.62	403.18	6.6347	268	0.1455	518.47	448.82	6.9108
199	0.1960	455.53	403.83	6.6393	269	0.1449	519.38	449.47	6.9142
200	0.1950	456.45	404.48	6.6439	270	0.1444	520.30	450.13	6.9176
201	0.1940	457.36	405.13	6.6484	271	0.1439	521.21	450.78	6.9210
202	0.1931	458.27	405.78	6.6529	272	0.1433	522.12	451.44	6.9243
203	0.1921	459.18	406.43	6.6574	273	0.1428	523.04	452.09	6.9277
204	0.1912	460.09	407.08	6.6619	274	0.1423	523.95	452.75	6.9310
205	0.1902	461.00	407.73	6.6664	275	0.1418	524.87	453.40	6.9344
206	0.1893	461.91	408.38	6.6708	276	0.1413	525.78	454.06	6.9377
207	0.1884	462.82	409.03	6.6752	277	0.1408	526.70	454.71	6.9410
208	0.1875	463.73	409.69	6.6796	278	0.1403	527.61	455.37	6.9443
209	0.1866	464.64	410.34	6.6840	279	0.1397	528.53	456.02	6.9476
210	0.1857	465.55	410.99	6.6883	280	0.1392	529.45	456.68	6.9509
211	0.1848	466.46	411.64	6.6926	281	0.1388	530.36	457.33	6.9541
212	0.1839	467.38	412.29	6.6970	282	0.1383	531.28	457.99	6.9574
213	0.1831	468.29	412.94	6.7012	283	0.1378	532.19	458.65	6.9606
214	0.1822	469.20	413.59	6.7055	284	0.1373	533.11	459.30	6.9639
215	0.1814	470.11	414.24	6.7098	285	0.1368	534.03	459.96	6.9671
216	0.1805	471.02	414.89	6.7140	286	0.1363	534.94	460.62	6.9703
217	0.1797	471.93	415.54	6.7182	287	0.1359	535.86	461.27	6.9735
218	0.1789	472.84	416.20	6.7224	288	0.1354	536.78	461.93	6.9767
219	0.1781	473.75	416.85	6.7265	289	0.1349	537.69	462.59	6.9799
220	0.1772	474.66	417.50	6.7307	290	0.1344	538.61	463.24	6.9830
221	0.1764	475.58	418.15	6.7348	291	0.1340	539.53	463.90	6.9862
222	0.1757	476.49	418.80	6.7389	292	0.1335	540.44	464.56	6.9893
223	0.1749	477.40	419.45	6.7430	293	0.1331	541.36	465.21	6.9925
224	0.1741	478.31	420.10	6.7471	294	0.1326	542.28	465.87	6.9956
225	0.1733	479.22	420.75	6.7512	295	0.1322	543.20	466.53	6.9987
226	0.1725	480.13	421.41	6.7552	296	0.1317	544.11	467.19	7.0018
227	0.1718	481.04	422.06	6.7592	297	0.1313	545.03	467.85	7.0049
228	0.1710	481.96	422.71	6.7633	298	0.1308	545.95	468.50	7.0080
229	0.1703	482.87	423.36	6.7672	299	0.1304	546.87	469.16	7.0111
230	0.1695	483.78	424.01	6.7712	300	0.1300	547.79	469.82	7.0141

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TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
					91	0.8621	356.94	333.44	5.7448
					92	0.8525	357.86	334.09	5.7548
					93	0.8432	358.77	334.74	5.7647
					94	0.8341	359.69	335.39	5.7745
					95	0.8252	360.61	336.05	5.7842
					96	0.8165	361.52	336.70	5.7938
					97	0.8079	362.44	337.35	5.8033
					98	0.7996	363.35	338.01	5.8127
					99	0.7914	364.27	338.66	5.8220
					100	0.7834	365.18	339.31	5.8312
					101	0.7755	366.10	339.97	5.8403
					102	0.7678	367.01	340.62	5.8493
					103	0.7603	367.93	341.27	5.8582
					104	0.7529	368.84	341.92	5.8670
					105	0.7456	369.75	342.58	5.8758
					106	0.7385	370.67	343.23	5.8844
					107	0.7315	371.58	343.88	5.8930
					108	0.7247	372.50	344.53	5.9015
					109	0.7180	373.41	345.19	5.9100
					110	0.7114	374.33	345.84	5.9183
					111	0.7049	375.24	346.49	5.9266
					112	0.6986	376.15	347.14	5.9348
					113	0.6923	377.07	347.80	5.9429
					114	0.6862	377.98	348.45	5.9510
					115	0.6802	378.89	349.10	5.9589
					116	0.6742	379.81	349.75	5.9668
					117	0.6684	380.72	350.40	5.9747
					118	0.6627	381.64	351.06	5.9825
					119	0.6571	382.55	351.71	5.9902
					120	0.6516	383.46	352.36	5.9978
					121	0.6462	384.37	353.01	6.0054
					122	0.6408	385.29	353.66	6.0129
					123	0.6356	386.20	354.32	6.0203
					124	0.6304	387.11	354.97	6.0277
55	1302.8	85.997	85.982	2.1743	125	0.6253	388.03	355.62	6.0351
56	1298.1	87.403	87.387	2.1996	126	0.6203	388.94	356.27	6.0423
57	1293.5	88.815	88.800	2.2246	127	0.6154	389.85	356.92	6.0496
58	1288.8	90.236	90.220	2.2493	128	0.6106	390.77	357.57	6.0567
59	1284.2	91.663	91.647	2.2737	129	0.6058	391.68	358.23	6.0638
60	1279.6	93.098	93.082	2.2978	130	0.6011	392.59	358.88	6.0709
61	1274.9	94.540	94.524	2.3217	131	0.5965	393.50	359.53	6.0779
62	1270.3	95.990	95.974	2.3453	132	0.5920	394.42	360.18	6.0848
63	1265.7	97.448	97.432	2.3686	133	0.5875	395.33	360.83	6.0917
64	1261.0	98.914	98.898	2.3917	134	0.5831	396.24	361.48	6.0985
65	1256.4	100.39	100.37	2.4145	135	0.5787	397.15	362.14	6.1053
66	1251.8	101.87	101.85	2.4372	136	0.5744	398.06	362.79	6.1120
67	1247.2	103.36	103.35	2.4596	137	0.5702	398.98	363.44	6.1187
68	1242.6	104.86	104.85	2.4818	138	0.5661	399.89	364.09	6.1254
69	1238.0	106.37	106.36	2.5039	139	0.5620	400.80	364.74	6.1319
70	1233.4	107.89	107.87	2.5257	140	0.5579	401.71	365.39	6.1385
71	1228.8	109.42	109.40	2.5474					
72	1224.2	110.96	110.94	2.5689	141	0.5540	402.63	366.04	6.1450
73	1219.6	112.51	112.49	2.5903	142	0.5500	403.54	366.69	6.1514
74	1215.0	114.06	114.05	2.6115	143	0.5462	404.45	367.35	6.1578
75	1210.4	115.63	115.62	2.6325	144	0.5424	405.36	368.00	6.1642
76	1205.9	117.21	117.20	2.6534	145	0.5386	406.27	368.65	6.1705
77	1201.3	118.80	118.79	2.6742	146	0.5349	407.19	369.30	6.1767
• 77.227	1200.3	118.44	118.42	2.6762	147	0.5312	408.10	369.95	6.1830
• 77.227	1.0191	344.33	324.45	5.5945	148	0.5276	409.01	370.60	6.1892
78	1.0088	345.04	324.95	5.6036	149	0.5241	409.92	371.25	6.1953
79	0.9957	345.95	325.60	5.6153	150	0.5206	410.83	371.90	6.2014
80	0.9830	346.87	326.25	5.6268					
81	0.9706	347.78	326.91	5.6382	151	0.5171	411.74	372.55	6.2075
82	0.9585	348.70	327.56	5.6494	152	0.5137	412.66	373.21	6.2135
83	0.9467	349.62	328.21	5.6605	153	0.5103	413.57	373.86	6.2194
84	0.9353	350.53	328.86	5.6715	154	0.5070	414.48	374.51	6.2254
85	0.9240	351.45	329.52	5.6824	155	0.5037	415.39	375.16	6.2313
86	0.9131	352.36	330.17	5.6931	156	0.5005	416.30	375.81	6.2371
87	0.9024	353.28	330.82	5.7037	157	0.4973	417.21	376.46	6.2430
88	0.8920	354.20	331.48	5.7141	158	0.4941	418.12	377.11	6.2488
89	0.8818	355.11	332.13	5.7245	159	0.4910	419.04	377.76	6.2545
90	0.8718	356.03	332.78	5.7347	160	0.4879	419.95	378.41	6.2602

• PHASE CHANGE

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
161	0.4849	420.86	379.06	6.2659	231	0.3377	484.65	424.63	6.5949
162	0.4819	421.77	379.71	6.2715	232	0.3362	485.56	425.29	6.5988
163	0.4789	422.68	380.37	6.2772	233	0.3348	486.47	425.94	6.6028
164	0.4760	423.59	381.02	6.2827	234	0.3333	487.39	426.59	6.6067
165	0.4731	424.50	381.67	6.2883	235	0.3319	488.30	427.24	6.6105
166	0.4702	425.42	382.32	6.2938	236	0.3305	489.21	427.89	6.6144
167	0.4674	426.33	382.97	6.2992	237	0.3291	490.12	428.55	6.6183
168	0.4646	427.24	383.62	6.3047	238	0.3277	491.04	429.20	6.6221
169	0.4618	428.15	384.27	6.3101	239	0.3263	491.95	429.85	6.6259
170	0.4591	429.06	384.92	6.3155	240	0.3250	492.86	430.50	6.6298
171	0.4564	429.97	385.57	6.3208	241	0.3236	493.77	431.16	6.6336
172	0.4538	430.88	386.22	6.3261	242	0.3223	494.69	431.81	6.6373
173	0.4511	431.79	386.87	6.3314	243	0.3210	495.60	432.46	6.6411
174	0.4485	432.71	387.52	6.3367	244	0.3197	496.51	433.11	6.6448
175	0.4460	433.62	388.17	6.3419	245	0.3183	497.42	433.77	6.6486
176	0.4434	434.53	388.83	6.3471	246	0.3170	498.34	434.42	6.6523
177	0.4409	435.44	389.48	6.3522	247	0.3158	499.25	435.07	6.6560
178	0.4384	436.35	390.13	6.3574	248	0.3145	500.16	435.72	6.6597
179	0.4360	437.26	390.78	6.3625	249	0.3132	501.08	436.38	6.6634
180	0.4335	438.17	391.43	6.3675	250	0.3120	501.99	437.03	6.6670
181	0.4311	439.08	392.08	6.3726	251	0.3107	502.90	437.68	6.6707
182	0.4288	439.99	392.73	6.3776	252	0.3095	503.81	438.34	6.6743
183	0.4264	440.91	393.38	6.3826	253	0.3083	504.73	438.99	6.6779
184	0.4241	441.82	394.03	6.3876	254	0.3071	505.64	439.64	6.6815
185	0.4218	442.73	394.68	6.3925	255	0.3058	506.55	440.29	6.6851
186	0.4195	443.64	395.33	6.3974	256	0.3047	507.47	440.95	6.6887
187	0.4173	444.55	395.98	6.4023	257	0.3035	508.38	441.60	6.6922
188	0.4150	445.46	396.63	6.4072	258	0.3023	509.30	442.26	6.6958
189	0.4128	446.37	397.28	6.4120	259	0.3011	510.21	442.91	6.6993
190	0.4107	447.28	397.94	6.4168	260	0.3000	511.12	443.56	6.7028
191	0.4085	448.19	398.59	6.4216	261	0.2988	512.04	444.22	6.7064
192	0.4064	449.11	399.24	6.4264	262	0.2977	512.95	444.87	6.7098
193	0.4043	450.02	399.89	6.4311	263	0.2965	513.86	445.52	6.7133
194	0.4022	450.93	400.54	6.4358	264	0.2954	514.78	446.18	6.7168
195	0.4001	451.84	401.19	6.4405	265	0.2943	515.69	446.83	6.7203
196	0.3981	452.75	401.84	6.4451	266	0.2932	516.61	447.49	6.7237
197	0.3960	453.66	402.49	6.4498	267	0.2921	517.52	448.14	6.7271
198	0.3940	454.57	403.14	6.4544	268	0.2910	518.44	448.80	6.7305
199	0.3921	455.48	403.79	6.4590	269	0.2899	519.35	449.45	6.7340
200	0.3901	456.39	404.44	6.4635	270	0.2888	520.27	450.10	6.7373
201	0.3881	457.31	405.09	6.4681	271	0.2878	521.18	450.76	6.7407
202	0.3862	458.22	405.75	6.4726	272	0.2867	522.10	451.41	6.7441
203	0.3843	459.13	406.40	6.4771	273	0.2857	523.01	452.07	6.7475
204	0.3824	460.04	407.05	6.4816	274	0.2846	523.93	452.72	6.7508
205	0.3806	460.95	407.70	6.4860	275	0.2836	524.84	453.38	6.7541
206	0.3787	461.86	408.35	6.4905	276	0.2826	525.76	454.03	6.7575
207	0.3769	462.77	409.00	6.4949	277	0.2815	526.67	454.69	6.7608
208	0.3751	463.68	409.65	6.4993	278	0.2805	527.59	455.35	6.7641
209	0.3733	464.60	410.30	6.5037	279	0.2795	528.50	456.00	6.7674
210	0.3715	465.51	410.95	6.5080	280	0.2785	529.42	456.66	6.7706
211	0.3697	466.42	411.61	6.5123	281	0.2775	530.33	457.31	6.7739
212	0.3680	467.33	412.26	6.5166	282	0.2765	531.25	457.97	6.7772
213	0.3662	468.24	412.91	6.5209	283	0.2756	532.17	458.62	6.7804
214	0.3645	469.15	413.56	6.5252	284	0.2746	533.08	459.28	6.7836
215	0.3628	470.06	414.21	6.5294	285	0.2736	534.00	459.94	6.7869
216	0.3611	470.98	414.86	6.5337	286	0.2727	534.92	460.59	6.7901
217	0.3595	471.89	415.51	6.5379	287	0.2717	535.83	461.25	6.7933
218	0.3578	472.80	416.16	6.5421	288	0.2708	536.75	461.91	6.7965
219	0.3562	473.71	416.82	6.5463	289	0.2698	537.67	462.56	6.7996
220	0.3546	474.62	417.47	6.5504	290	0.2689	538.58	463.22	6.8028
221	0.3530	475.53	418.12	6.5545	291	0.2680	539.50	463.88	6.8060
222	0.3514	476.44	418.77	6.5587	292	0.2671	540.42	464.54	6.8091
223	0.3498	477.36	419.42	6.5628	293	0.2662	541.34	465.19	6.8122
224	0.3482	478.27	420.07	6.5668	294	0.2652	542.25	465.85	6.8154
225	0.3467	479.18	420.72	6.5709	295	0.2643	543.17	466.51	6.8185
226	0.3451	480.09	421.38	6.5749	296	0.2635	544.09	467.17	6.8216
227	0.3436	481.00	422.03	6.5790	297	0.2626	545.01	467.83	6.8247
228	0.3421	481.91	422.68	6.5830	298	0.2617	545.93	468.48	6.8278
229	0.3406	482.83	423.33	6.5870	299	0.2608	546.84	469.14	6.8308
230	0.3391	483.74	423.98	6.5909	300	0.2599	547.76	469.80	6.8339

0.30 ATMOSPHERE ISOBAR

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
					91	1.2971	356.75	333.31	5.6381
					92	1.2826	357.67	333.97	5.6481
					93	1.2685	358.59	334.62	5.6581
					94	1.2547	359.50	335.28	5.6679
					95	1.2412	360.42	335.93	5.6776
					96	1.2280	361.34	336.59	5.6872
					97	1.2150	362.26	337.24	5.6967
					98	1.2024	363.18	337.90	5.7062
					99	1.1900	364.09	338.55	5.7155
					100	1.1779	365.01	339.21	5.7247
					101	1.1660	365.93	339.86	5.7338
					102	1.1543	366.85	340.51	5.7429
					103	1.1429	367.76	341.17	5.7518
					104	1.1317	368.68	341.82	5.7607
					105	1.1208	369.60	342.48	5.7694
					106	1.1100	370.52	343.13	5.7781
					107	1.0995	371.43	343.78	5.7867
					108	1.0891	372.35	344.44	5.7953
					109	1.0790	373.26	345.09	5.8037
					110	1.0690	374.18	345.75	5.8121
					111	1.0592	375.10	346.40	5.8204
					112	1.0496	376.01	347.05	5.8286
					113	1.0402	376.93	347.71	5.8367
					114	1.0310	377.84	348.36	5.8448
					115	1.0219	378.76	349.01	5.8528
					116	1.0129	379.68	349.67	5.8607
					117	1.0042	380.59	350.32	5.8686
					118	0.9956	381.51	350.97	5.8764
					119	0.9871	382.42	351.63	5.8841
					120	0.9788	383.34	352.28	5.8917
					121	0.9706	384.25	352.93	5.8993
					122	0.9625	385.17	353.59	5.9069
					123	0.9546	386.08	354.24	5.9143
					124	0.9468	387.00	354.89	5.9217
55	1302.8	86.004	85.980	2.1743	125	0.9392	387.91	355.54	5.9291
56	1298.2	87.409	87.386	2.1996	126	0.9316	388.82	356.20	5.9364
57	1293.5	88.822	88.798	2.2246	127	0.9242	389.74	356.85	5.9436
58	1288.9	90.242	90.218	2.2493	128	0.9169	390.65	357.50	5.9508
59	1284.2	91.669	91.645	2.2737	129	0.9097	391.57	358.15	5.9579
60	1279.6	93.104	93.080	2.2978	130	0.9027	392.48	358.81	5.9649
61	1274.9	94.546	94.522	2.3216	131	0.8957	393.40	359.46	5.9719
62	1270.3	95.996	95.972	2.3452	132	0.8889	394.31	360.11	5.9789
63	1265.7	97.454	97.430	2.3685	133	0.8821	395.22	360.76	5.9858
64	1261.0	98.920	98.896	2.3916	134	0.8755	396.14	361.42	5.9926
65	1256.4	100.39	100.37	2.4145	135	0.8689	397.05	362.07	5.9994
66	1251.8	101.88	101.85	2.4371	136	0.8625	397.96	362.72	6.0062
67	1247.2	103.37	103.34	2.4596	137	0.8562	398.88	363.37	6.0129
68	1242.6	104.87	104.84	2.4818	138	0.8499	399.79	364.02	6.0195
69	1238.0	106.38	106.35	2.5038	139	0.8437	400.70	364.68	6.0261
70	1233.4	107.90	107.87	2.5257	140	0.8377	401.62	365.33	6.0326
71	1228.8	109.43	109.40	2.5474	141	0.8317	402.53	365.98	6.0391
72	1224.2	110.96	110.94	2.5689	142	0.8258	403.44	366.63	6.0456
73	1219.6	112.51	112.49	2.5902	143	0.8200	404.36	367.28	6.0520
74	1215.0	114.07	114.05	2.6114	144	0.8142	405.27	367.94	6.0584
75	1210.5	115.64	115.61	2.6325	145	0.8086	406.18	368.59	6.0647
76	1205.9	117.22	117.19	2.6534	146	0.8030	407.10	369.24	6.0710
77	1201.3	118.81	118.78	2.6742	147	0.7975	408.01	369.89	6.0772
78	1196.8	120.41	120.38	2.6948	148	0.7921	408.92	370.54	6.0834
79	1192.2	122.02	121.99	2.7154	149	0.7867	409.83	371.19	6.0895
80	1187.6	123.64	123.62	2.7357	150	0.7814	410.75	371.85	6.0956
• 80.102	1187.2	123.49	123.46	2.7366					
• 80.102	1.4790	346.73	326.18	5.5209	151	0.7762	411.66	372.50	6.1017
81	1.4621	347.56	326.77	5.5311	152	0.7711	412.57	373.15	6.1077
82	1.4437	348.48	327.42	5.5424	153	0.7660	413.48	373.80	6.1137
83	1.4258	349.40	328.08	5.5535	154	0.7610	414.40	374.45	6.1196
84	1.4083	350.32	328.73	5.5645	155	0.7561	415.31	375.10	6.1256
85	1.3912	351.23	329.38	5.5754	156	0.7512	416.22	375.76	6.1314
86	1.3746	352.15	330.04	5.5862	157	0.7464	417.13	376.41	6.1373
87	1.3583	353.07	330.69	5.5968	158	0.7416	418.05	377.06	6.1430
88	1.3425	353.99	331.35	5.6073	159	0.7369	418.96	377.71	6.1488
89	1.3270	354.91	332.00	5.6177	160	0.7323	419.87	378.36	6.1545
90	1.3119	355.83	332.66	5.6279					

• PHASE CHANGE

TEMPER- ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER- ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
161	0.7277	420.78	379.01	6.1602	231	0.5066	484.61	424.61	6.4894
162	0.7232	421.70	379.66	6.1659	232	0.5044	485.52	425.26	6.4933
163	0.7188	422.61	380.32	6.1715	233	0.5022	486.44	425.91	6.4972
164	0.7143	423.52	380.97	6.1770	234	0.5001	487.35	426.56	6.5012
165	0.7100	424.43	381.62	6.1826	235	0.4979	488.26	427.21	6.5050
166	0.7057	425.34	382.27	6.1881	236	0.4958	489.17	427.87	6.5089
167	0.7014	426.26	382.92	6.1936	237	0.4937	490.09	428.52	6.5128
168	0.6973	427.17	383.57	6.1990	238	0.4917	491.00	429.17	6.5166
169	0.6931	428.08	384.22	6.2044	239	0.4896	491.91	429.82	6.5205
170	0.6890	428.99	384.87	6.2098	240	0.4875	492.82	430.48	6.5243
171	0.6850	429.90	385.53	6.2152	241	0.4855	493.74	431.13	6.5281
172	0.6810	430.82	386.18	6.2205	242	0.4835	494.65	431.78	6.5318
173	0.6770	431.73	386.83	6.2258	243	0.4815	495.56	432.43	6.5356
174	0.6731	432.64	387.48	6.2310	244	0.4795	496.48	433.09	6.5394
175	0.6692	433.55	388.13	6.2362	245	0.4776	497.39	433.74	6.5431
176	0.6654	434.46	388.78	6.2414	246	0.4756	498.30	434.39	6.5468
177	0.6616	435.37	389.43	6.2466	247	0.4737	499.21	435.04	6.5505
178	0.6579	436.29	390.08	6.2517	248	0.4718	500.13	435.70	6.5542
179	0.6542	437.20	390.73	6.2569	249	0.4699	501.04	436.35	6.5579
180	0.6506	438.11	391.39	6.2619	250	0.4680	501.95	437.00	6.5615
181	0.6470	439.02	392.04	6.2670	251	0.4661	502.87	437.66	6.5652
182	0.6434	439.93	392.69	6.2720	252	0.4643	503.78	438.31	6.5688
183	0.6399	440.85	393.34	6.2770	253	0.4625	504.69	438.96	6.5724
184	0.6364	441.76	393.99	6.2820	254	0.4606	505.61	439.62	6.5760
185	0.6329	442.67	394.64	6.2869	255	0.4588	506.52	440.27	6.5796
186	0.6295	443.58	395.29	6.2918	256	0.4570	507.44	440.92	6.5832
187	0.6261	444.49	395.94	6.2967	257	0.4552	508.35	441.58	6.5868
188	0.6228	445.40	396.59	6.3016	258	0.4535	509.26	442.23	6.5903
189	0.6195	446.32	397.25	6.3064	259	0.4517	510.18	442.88	6.5938
190	0.6162	447.23	397.90	6.3112	260	0.4500	511.09	443.54	6.5974
191	0.6130	448.14	398.55	6.3160	261	0.4483	512.00	444.19	6.6009
192	0.6098	449.05	399.20	6.3208	262	0.4465	512.92	444.85	6.6044
193	0.6066	449.96	399.85	6.3255	263	0.4448	513.83	445.50	6.6079
194	0.6035	450.87	400.50	6.3302	264	0.4432	514.75	446.15	6.6113
195	0.6004	451.78	401.15	6.3349	265	0.4415	515.66	446.81	6.6148
196	0.5973	452.70	401.80	6.3396	266	0.4398	516.58	447.46	6.6182
197	0.5942	453.61	402.45	6.3442	267	0.4382	517.49	448.12	6.6217
198	0.5912	454.52	403.11	6.3488	268	0.4365	518.41	448.77	6.6251
199	0.5883	455.43	403.76	6.3534	269	0.4349	519.32	449.43	6.6285
200	0.5853	456.34	404.41	6.3580	270	0.4333	520.24	450.08	6.6319
201	0.5824	457.25	405.06	6.3625	271	0.4317	521.15	450.74	6.6353
202	0.5795	458.17	405.71	6.3671	272	0.4301	522.07	451.39	6.6386
203	0.5766	459.08	406.36	6.3716	273	0.4285	522.98	452.05	6.6420
204	0.5738	459.99	407.01	6.3760	274	0.4270	523.90	452.70	6.6453
205	0.5710	460.90	407.66	6.3805	275	0.4254	524.81	453.36	6.6487
206	0.5682	461.81	408.32	6.3849	276	0.4239	525.73	454.01	6.6520
207	0.5655	462.72	408.97	6.3893	277	0.4223	526.64	454.67	6.6553
208	0.5627	463.64	409.62	6.3937	278	0.4208	527.56	455.32	6.6586
209	0.5600	464.55	410.27	6.3981	279	0.4193	528.47	455.98	6.6619
210	0.5574	465.46	410.92	6.4025	280	0.4178	529.39	456.64	6.6652
211	0.5547	466.37	411.57	6.4068	281	0.4163	530.31	457.29	6.6684
212	0.5521	467.28	412.22	6.4111	282	0.4148	531.22	457.95	6.6717
213	0.5495	468.19	412.87	6.4154	283	0.4134	532.14	458.60	6.6749
214	0.5469	469.11	413.53	6.4197	284	0.4119	533.06	459.26	6.6782
215	0.5444	470.02	414.18	6.4239	285	0.4105	533.97	459.92	6.6814
216	0.5418	470.93	414.83	6.4281	286	0.4090	534.89	460.57	6.6846
217	0.5393	471.84	415.48	6.4324	287	0.4076	535.81	461.23	6.6878
218	0.5369	472.75	416.13	6.4366	288	0.4062	536.72	461.89	6.6910
219	0.5344	473.67	416.78	6.4407	289	0.4048	537.64	462.54	6.6942
220	0.5320	474.58	417.44	6.4449	290	0.4034	538.56	463.20	6.6973
221	0.5296	475.49	418.09	6.4490	291	0.4020	539.48	463.86	6.7005
222	0.5272	476.40	418.74	6.4531	292	0.4006	540.39	464.52	6.7036
223	0.5248	477.31	419.39	6.4572	293	0.3993	541.31	465.17	6.7068
224	0.5224	478.23	420.04	6.4613	294	0.3979	542.23	465.83	6.7099
225	0.5201	479.14	420.69	6.4654	295	0.3965	543.15	466.49	6.7130
226	0.5178	480.05	421.35	6.4694	296	0.3952	544.06	467.15	6.7161
227	0.5155	480.96	422.00	6.4734	297	0.3939	544.98	467.81	6.7192
228	0.5133	481.87	422.65	6.4775	298	0.3925	545.90	468.46	6.7223
229	0.5110	482.79	423.30	6.4815	299	0.3912	546.82	469.12	6.7254
230	0.5088	483.70	423.95	6.4854	300	0.3899	547.74	469.78	6.7285

0.40 ATMOSPHERE ISOBAR

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
					91	1.7348	356.55	333.19	5.5620
					92	1.7153	357.47	333.85	5.5720
					93	1.6963	358.40	334.50	5.5820
					94	1.6777	359.32	335.16	5.5919
					95	1.6595	360.24	335.82	5.6016
					96	1.6417	361.16	336.47	5.6113
					97	1.6243	362.08	337.13	5.6208
					98	1.6072	363.00	337.78	5.6302
					99	1.5906	363.92	338.44	5.6396
					100	1.5742	364.84	339.10	5.6488
					101	1.5582	365.76	339.75	5.6580
					102	1.5426	366.68	340.41	5.6671
					103	1.5272	367.60	341.06	5.6760
					104	1.5122	368.52	341.72	5.6849
					105	1.4975	369.44	342.38	5.6937
					106	1.4830	370.36	343.03	5.7024
					107	1.4688	371.28	343.69	5.7111
					108	1.4549	372.20	344.34	5.7196
					109	1.4413	373.12	345.00	5.7281
					110	1.4279	374.04	345.65	5.7365
					111	1.4148	374.95	346.31	5.7448
					112	1.4019	375.87	346.96	5.7530
					113	1.3893	376.79	347.62	5.7612
					114	1.3769	377.71	348.27	5.7692
					115	1.3647	378.63	348.93	5.7773
					116	1.3527	379.54	349.58	5.7852
					117	1.3409	380.46	350.23	5.7931
					118	1.3294	381.38	350.89	5.8009
					119	1.3180	382.29	351.54	5.8086
					120	1.3069	383.21	352.20	5.8163
					121	1.2959	384.13	352.85	5.8239
					122	1.2851	385.04	353.51	5.8314
					123	1.2745	385.96	354.16	5.8389
					124	1.2641	386.88	354.81	5.8463
55	1302.8	86.010	85.979	2.1742	125	1.2538	387.79	355.47	5.8537
56	1298.2	87.415	87.384	2.1996	126	1.2437	388.71	356.12	5.8610
57	1293.5	88.828	88.797	2.2246	127	1.2338	389.62	356.77	5.8682
58	1288.9	90.248	90.216	2.2493	128	1.2240	390.54	357.43	5.8754
59	1284.2	91.675	91.644	2.2737	129	1.2144	391.46	358.08	5.8825
60	1279.6	93.110	93.078	2.2978	130	1.2049	392.37	358.73	5.8896
61	1274.9	94.552	94.521	2.3216	131	1.1956	393.29	359.39	5.8966
62	1270.3	96.003	95.971	2.3452	132	1.1864	394.20	360.04	5.9036
63	1265.7	97.460	97.428	2.3685	133	1.1774	395.12	360.69	5.9105
64	1261.1	98.926	98.894	2.3916	134	1.1685	396.03	361.35	5.9174
65	1256.4	100.40	100.37	2.4145	135	1.1598	396.95	362.00	5.9242
66	1251.8	101.88	101.85	2.4371	136	1.1511	397.86	362.65	5.9309
67	1247.2	103.37	103.34	2.4595	137	1.1426	398.78	363.31	5.9376
68	1242.6	104.88	104.84	2.4818	138	1.1343	399.69	363.96	5.9443
69	1238.0	106.38	106.35	2.5038	139	1.1260	400.61	364.61	5.9509
70	1233.4	107.90	107.87	2.5256	140	1.1179	401.52	365.26	5.9574
71	1228.8	109.43	109.40	2.5473	141	1.1099	402.44	365.92	5.9639
72	1224.2	110.97	110.94	2.5688	142	1.1020	403.35	366.57	5.9704
73	1219.6	112.52	112.49	2.5902	143	1.0942	404.26	367.22	5.9768
74	1215.1	114.08	114.04	2.6114	144	1.0865	405.18	367.88	5.9832
75	1210.5	115.65	115.61	2.6325	145	1.0790	406.09	368.53	5.9895
76	1205.9	117.22	117.19	2.6534	146	1.0715	407.01	369.18	5.9958
77	1201.3	118.81	118.78	2.6742	147	1.0641	407.92	369.83	6.0020
78	1196.8	120.41	120.38	2.6948	148	1.0569	408.83	370.48	6.0082
79	1192.2	122.03	121.99	2.7153	149	1.0497	409.75	371.14	6.0144
80	1187.7	123.65	123.61	2.7357	150	1.0427	410.66	371.79	6.0205
81	1183.1	125.28	125.24	2.7560					
82	1178.6	126.92	126.89	2.7761					
• 82.286	1177.3	126.51	126.47	2.7785	151	1.0357	411.58	372.44	6.0266
• 82.286	1.9259	348.52	327.47	5.4691	152	1.0288	412.49	373.09	6.0326
83	1.9086	349.17	327.94	5.4771	153	1.0220	413.40	373.75	6.0386
84	1.8850	350.10	328.60	5.4881	154	1.0154	414.32	374.40	6.0445
85	1.8619	351.02	329.25	5.4991	155	1.0087	415.23	375.05	6.0504
86	1.8394	351.94	329.91	5.5098	156	1.0022	416.14	375.70	6.0563
87	1.8175	352.86	330.56	5.5205	157	0.9958	417.06	376.35	6.0621
88	1.7961	353.79	331.22	5.5311	158	0.9894	417.97	377.01	6.0679
89	1.7752	354.71	331.88	5.5415	159	0.9832	418.88	377.66	6.0737
90	1.7548	355.63	332.53	5.5518	160	0.9770	419.80	378.31	6.0794

• PHASE CHANGE

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
161	0.9709	420.71	378.96	6.0851	231	0.6756	484.57	424.58	6.4145
162	0.9648	421.62	379.61	6.0908	232	0.6726	485.48	425.23	6.4184
163	0.9589	422.53	380.27	6.0964	233	0.6697	486.40	425.88	6.4224
164	0.9530	423.45	380.92	6.1020	234	0.6669	487.31	426.53	6.4263
165	0.9472	424.36	381.57	6.1075	235	0.6640	488.22	427.19	6.4302
166	0.9414	425.27	382.22	6.1130	236	0.6612	489.14	427.84	6.4340
167	0.9358	426.19	382.87	6.1185	237	0.6584	490.05	428.49	6.4379
168	0.9302	427.10	383.52	6.1240	238	0.6556	490.96	429.14	6.4417
169	0.9246	428.01	384.18	6.1294	239	0.6529	491.87	429.80	6.4456
170	0.9191	428.92	384.83	6.1348	240	0.6502	492.79	430.45	6.4494
171	0.9137	429.84	385.48	6.1401	241	0.6475	493.70	431.10	6.4532
172	0.9084	430.75	386.13	6.1454	242	0.6448	494.61	431.75	6.4570
173	0.9031	431.66	386.78	6.1507	243	0.6421	495.53	432.41	6.4607
174	0.8979	432.57	387.43	6.1560	244	0.6395	496.44	433.06	6.4645
175	0.8927	433.49	388.09	6.1612	245	0.6369	497.35	433.71	6.4682
176	0.8876	434.40	388.74	6.1664	246	0.6343	498.27	434.37	6.4719
177	0.8826	435.31	389.39	6.1716	247	0.6317	499.18	435.02	6.4756
178	0.8776	436.22	390.04	6.1767	248	0.6291	500.09	435.67	6.4793
179	0.8727	437.14	390.69	6.1818	249	0.6266	501.01	436.32	6.4830
180	0.8678	438.05	391.34	6.1869	250	0.6241	501.92	436.98	6.4867
181	0.8630	438.96	391.99	6.1920	251	0.6216	502.83	437.63	6.4903
182	0.8582	439.87	392.65	6.1970	252	0.6191	503.75	438.28	6.4939
183	0.8535	440.79	393.30	6.2020	253	0.6167	504.66	438.94	6.4976
184	0.8488	441.70	393.95	6.2070	254	0.6143	505.57	439.59	6.5012
185	0.8442	442.61	394.60	6.2119	255	0.6118	506.49	440.25	6.5048
186	0.8397	443.52	395.25	6.2168	256	0.6094	507.40	440.90	6.5083
187	0.8351	444.43	395.90	6.2217	257	0.6071	508.32	441.55	6.5119
188	0.8307	445.35	396.55	6.2266	258	0.6047	509.23	442.21	6.5154
189	0.8263	446.26	397.21	6.2314	259	0.6024	510.14	442.86	6.5190
190	0.8219	447.17	397.86	6.2362	260	0.6000	511.06	443.51	6.5225
191	0.8176	448.08	398.51	6.2410	261	0.5977	511.97	444.17	6.5260
192	0.8133	448.99	399.16	6.2458	262	0.5955	512.89	444.82	6.5295
193	0.8091	449.91	399.81	6.2505	263	0.5932	513.80	445.48	6.5330
194	0.8049	450.82	400.46	6.2553	264	0.5909	514.72	446.13	6.5365
195	0.8007	451.73	401.11	6.2599	265	0.5887	515.63	446.79	6.5399
196	0.7966	452.64	401.77	6.2646	266	0.5865	516.55	447.44	6.5434
197	0.7926	453.56	402.42	6.2692	267	0.5843	517.46	448.09	6.5468
198	0.7886	454.47	403.07	6.2739	268	0.5821	518.38	448.75	6.5502
199	0.7846	455.38	403.72	6.2785	269	0.5799	519.29	449.40	6.5536
200	0.7806	456.29	404.37	6.2830	270	0.5778	520.21	450.06	6.5570
201	0.7767	457.20	405.02	6.2876	271	0.5757	521.12	450.71	6.5604
202	0.7729	458.12	405.68	6.2921	272	0.5735	522.04	451.37	6.5638
203	0.7691	459.03	406.33	6.2966	273	0.5714	522.95	452.02	6.5671
204	0.7653	459.94	406.98	6.3011	274	0.5693	523.87	452.68	6.5705
205	0.7615	460.85	407.63	6.3056	275	0.5673	524.78	453.33	6.5738
206	0.7578	461.76	408.28	6.3100	276	0.5652	525.70	453.99	6.5771
207	0.7541	462.68	408.93	6.3144	277	0.5632	526.62	454.65	6.5805
208	0.7505	463.59	409.58	6.3188	278	0.5611	527.53	455.30	6.5838
209	0.7469	464.50	410.24	6.3232	279	0.5591	528.45	455.96	6.5871
210	0.7433	465.41	410.89	6.3275	280	0.5571	529.36	456.61	6.5903
211	0.7398	466.32	411.54	6.3319	281	0.5551	530.28	457.27	6.5936
212	0.7363	467.24	412.19	6.3362	282	0.5532	531.20	457.93	6.5969
213	0.7328	468.15	412.84	6.3405	283	0.5512	532.11	458.58	6.6001
214	0.7294	469.06	413.49	6.3447	284	0.5493	533.03	459.24	6.6033
215	0.7260	469.97	414.15	6.3490	285	0.5473	533.95	459.90	6.6066
216	0.7226	470.89	414.80	6.3532	286	0.5454	534.86	460.55	6.6098
217	0.7193	471.80	415.45	6.3574	287	0.5435	535.78	461.21	6.6130
218	0.7160	472.71	416.10	6.3616	288	0.5416	536.70	461.87	6.6162
219	0.7127	473.62	416.75	6.3658	289	0.5397	537.61	462.52	6.6193
220	0.7094	474.53	417.40	6.3700	290	0.5379	538.53	463.18	6.6225
221	0.7062	475.45	418.06	6.3741	291	0.5360	539.45	463.84	6.6257
222	0.7030	476.36	418.71	6.3782	292	0.5342	540.37	464.50	6.6288
223	0.6999	477.27	419.36	6.3823	293	0.5324	541.29	465.15	6.6319
224	0.6967	478.18	420.01	6.3864	294	0.5306	542.20	465.81	6.6351
225	0.6936	479.10	420.66	6.3905	295	0.5288	543.12	466.47	6.6382
226	0.6905	480.01	421.32	6.3945	296	0.5270	544.04	467.13	6.6413
227	0.6875	480.92	421.97	6.3985	297	0.5252	544.96	467.79	6.6444
228	0.6845	481.83	422.62	6.4026	298	0.5234	545.88	468.44	6.6475
229	0.6815	482.75	423.27	6.4066	299	0.5217	546.80	469.10	6.6506
230	0.6785	483.66	423.92	6.4105	300	0.5199	547.71	469.76	6.6536

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TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
					91	2.1753	356.36	333.07	5.5026
					92	2.1507	357.28	333.72	5.5127
					93	2.1267	358.21	334.38	5.5227
					94	2.1031	359.13	335.04	5.5326
					95	2.0801	360.05	335.70	5.5424
					96	2.0577	360.98	336.36	5.5520
					97	2.0357	361.90	337.01	5.5616
					98	2.0142	362.83	337.67	5.5711
					99	1.9931	363.75	338.33	5.5805
					100	1.9725	364.67	338.99	5.5897
					101	1.9524	365.59	339.65	5.5989
					102	1.9326	366.52	340.30	5.6080
					103	1.9133	367.44	340.96	5.6170
					104	1.8943	368.36	341.62	5.6259
					105	1.8757	369.28	342.27	5.6347
					106	1.8575	370.21	342.93	5.6435
					107	1.8397	371.13	343.59	5.6521
					108	1.8222	372.05	344.24	5.6607
					109	1.8050	372.97	344.90	5.6692
					110	1.7882	373.89	345.56	5.6776
					111	1.7717	374.81	346.21	5.6859
					112	1.7555	375.73	346.87	5.6942
					113	1.7396	376.65	347.53	5.7024
					114	1.7239	377.57	348.18	5.7105
					115	1.7086	378.49	348.84	5.7185
					116	1.6935	379.41	349.49	5.7265
					117	1.6787	380.33	350.15	5.7343
					118	1.6642	381.25	350.80	5.7422
					119	1.6499	382.17	351.46	5.7499
					120	1.6359	383.08	352.12	5.7576
					121	1.6221	384.00	352.77	5.7652
					122	1.6086	384.92	353.43	5.7728
					123	1.5952	385.84	354.08	5.7803
					124	1.5821	386.76	354.74	5.7877
55	1302.8	86.016	85.977	2.1742	125	1.5692	387.68	355.39	5.7951
56	1298.2	87.421	87.382	2.1995	126	1.5566	388.59	356.04	5.8024
57	1293.5	88.834	88.795	2.2245	127	1.5441	389.51	356.70	5.8097
58	1288.9	90.254	90.215	2.2492	128	1.5318	390.43	357.35	5.8168
59	1284.2	91.682	91.642	2.2736	129	1.5197	391.34	358.01	5.8240
60	1279.6	93.116	93.077	2.2977	130	1.5079	392.26	358.66	5.8311
61	1275.0	94.559	94.519	2.3216	131	1.4962	393.18	359.32	5.8381
62	1270.3	96.009	95.969	2.3452	132	1.4846	394.10	359.97	5.8451
63	1265.7	97.467	97.427	2.3685	133	1.4733	395.01	360.62	5.8520
64	1261.1	98.933	98.892	2.3916	134	1.4621	395.93	361.28	5.8588
65	1256.5	100.41	100.37	2.4144	135	1.4512	396.84	361.93	5.8657
66	1251.8	101.89	101.85	2.4371	136	1.4403	397.76	362.59	5.8724
67	1247.2	103.38	103.34	2.4595	137	1.4297	398.68	363.24	5.8791
68	1242.6	104.88	104.84	2.4817	138	1.4192	399.59	363.89	5.8858
69	1238.0	106.39	106.35	2.5038	139	1.4088	400.51	364.55	5.8924
70	1233.4	107.91	107.87	2.5256	140	1.3986	401.42	365.20	5.8990
71	1228.8	109.44	109.40	2.5473	141	1.3886	402.34	365.85	5.9055
72	1224.2	110.98	110.93	2.5688	142	1.3787	403.26	366.51	5.9120
73	1219.7	112.52	112.48	2.5902	143	1.3689	404.17	367.16	5.9184
74	1215.1	114.08	114.04	2.6114	144	1.3593	405.09	367.81	5.9248
75	1210.5	115.65	115.61	2.6324	145	1.3498	406.00	368.47	5.9311
76	1205.9	117.23	117.19	2.6533	146	1.3404	406.92	369.12	5.9374
77	1201.4	118.82	118.78	2.6741	147	1.3312	407.83	369.77	5.9436
78	1196.8	120.42	120.38	2.6948	148	1.3221	408.75	370.43	5.9498
79	1192.2	122.03	121.99	2.7153	149	1.3131	409.66	371.08	5.9560
80	1187.7	123.65	123.61	2.7357	150	1.3043	410.58	371.73	5.9621
81	1183.1	125.28	125.24	2.7560					
82	1178.6	126.93	126.88	2.7761	151	1.2955	411.49	372.39	5.9682
83	1174.0	128.58	128.54	2.7961	152	1.2869	412.41	373.04	5.9742
84	1169.5	130.24	130.20	2.8161	153	1.2784	413.32	373.69	5.9802
● 84.072	1169.2	130.14	130.10	2.8166	154	1.2700	414.23	374.34	5.9862
● 84.072	2.3634	349.94	328.51	5.4293	155	1.2618	415.15	375.00	5.9921
85	2.3363	350.80	329.12	5.4395	156	1.2536	416.06	375.65	5.9980
86	2.3078	351.73	329.78	5.4503	157	1.2455	416.98	376.30	6.0038
87	2.2800	352.65	330.43	5.4610	158	1.2376	417.89	376.95	6.0096
88	2.2529	353.58	331.09	5.4716	159	1.2297	418.80	377.61	6.0154
89	2.2264	354.51	331.75	5.4820	160	1.2220	419.72	378.26	6.0211
90	2.2006	355.43	332.41	5.4924					

● PHASE CHANGE

TEMPER- ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER- ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
161	1.2143	420.63	378.91	6.0268	231	0.8446	484.53	424.55	6.3564
162	1.2067	421.55	379.56	6.0325	232	0.8409	485.45	425.20	6.3603
163	1.1993	422.46	380.22	6.0381	233	0.8373	486.36	425.85	6.3642
164	1.1919	423.37	380.87	6.0437	234	0.8337	487.27	426.51	6.3681
165	1.1846	424.29	381.52	6.0492	235	0.8302	488.18	427.16	6.3720
166	1.1774	425.20	382.17	6.0548	236	0.8266	489.10	427.81	6.3759
167	1.1703	426.11	382.82	6.0602	237	0.8231	490.01	428.46	6.3798
168	1.1633	427.03	383.48	6.0657	238	0.8197	490.92	429.12	6.3836
169	1.1564	427.94	384.13	6.0711	239	0.8162	491.84	429.77	6.3875
170	1.1495	428.85	384.78	6.0765	240	0.8128	492.75	430.42	6.3913
171	1.1427	429.77	385.43	6.0819	241	0.8094	493.66	431.07	6.3951
172	1.1360	430.68	386.09	6.0872	242	0.8061	494.58	431.73	6.3988
173	1.1294	431.59	386.74	6.0925	243	0.8028	495.49	432.38	6.4026
174	1.1229	432.51	387.39	6.0977	244	0.7995	496.40	433.03	6.4064
175	1.1164	433.42	388.04	6.1030	245	0.7962	497.32	433.69	6.4101
176	1.1100	434.33	388.69	6.1082	246	0.7929	498.23	434.34	6.4138
177	1.1037	435.25	389.35	6.1133	247	0.7897	499.14	434.99	6.4175
178	1.0975	436.16	390.00	6.1185	248	0.7865	500.06	435.65	6.4212
179	1.0913	437.07	390.65	6.1236	249	0.7834	500.97	436.30	6.4249
180	1.0852	437.99	391.30	6.1287	250	0.7802	501.89	436.95	6.4286
181	1.0792	438.90	391.95	6.1338	251	0.7771	502.80	437.61	6.4322
182	1.0732	439.81	392.60	6.1388	252	0.7740	503.71	438.26	6.4358
183	1.0673	440.73	393.26	6.1438	253	0.7710	504.63	438.91	6.4395
184	1.0614	441.64	393.91	6.1488	254	0.7679	505.54	439.57	6.4431
185	1.0557	442.55	394.56	6.1537	255	0.7649	506.46	440.22	6.4467
186	1.0500	443.46	395.21	6.1586	256	0.7619	507.37	440.87	6.4502
187	1.0443	444.38	395.86	6.1635	257	0.7589	508.28	441.53	6.4538
188	1.0387	445.29	396.52	6.1684	258	0.7560	509.20	442.18	6.4574
189	1.0332	446.20	397.17	6.1732	259	0.7530	510.11	442.84	6.4609
190	1.0277	447.11	397.82	6.1780	260	0.7501	511.03	443.49	6.4644
191	1.0223	448.03	398.47	6.1828	261	0.7473	511.94	444.14	6.4679
192	1.0170	448.94	399.12	6.1876	262	0.7444	512.86	444.80	6.4714
193	1.0117	449.85	399.77	6.1923	263	0.7416	513.77	445.45	6.4749
194	1.0064	450.76	400.43	6.1971	264	0.7388	514.69	446.11	6.4784
195	1.0012	451.68	401.08	6.2018	265	0.7360	515.60	446.76	6.4818
196	0.9961	452.59	401.73	6.2064	266	0.7332	516.52	447.42	6.4853
197	0.9910	453.50	402.38	6.2111	267	0.7304	517.43	448.07	6.4887
198	0.9860	454.42	403.03	6.2157	268	0.7277	518.35	448.73	6.4921
199	0.9810	455.33	403.68	6.2203	269	0.7250	519.26	449.38	6.4955
200	0.9761	456.24	404.34	6.2249	270	0.7223	520.18	450.04	6.4989
201	0.9712	457.15	404.99	6.2294	271	0.7196	521.09	450.69	6.5023
202	0.9664	458.07	405.64	6.2339	272	0.7170	522.01	451.35	6.5057
203	0.9616	458.98	406.29	6.2384	273	0.7143	522.92	452.00	6.5091
204	0.9569	459.89	406.94	6.2429	274	0.7117	523.84	452.66	6.5124
205	0.9522	460.80	407.59	6.2474	275	0.7091	524.76	453.31	6.5157
206	0.9475	461.72	408.25	6.2518	276	0.7066	525.67	453.97	6.5191
207	0.9429	462.63	408.90	6.2563	277	0.7040	526.59	454.62	6.5224
208	0.9384	463.54	409.55	6.2606	278	0.7015	527.50	455.28	6.5257
209	0.9339	464.45	410.20	6.2650	279	0.6990	528.42	455.94	6.5290
210	0.9294	465.37	410.85	6.2694	280	0.6965	529.34	456.59	6.5323
211	0.9250	466.28	411.51	6.2737	281	0.6940	530.25	457.25	6.5355
212	0.9206	467.19	412.16	6.2780	282	0.6915	531.17	457.90	6.5388
213	0.9162	468.10	412.81	6.2823	283	0.6891	532.09	458.56	6.5420
214	0.9119	469.02	413.46	6.2866	284	0.6866	533.00	459.22	6.5453
215	0.9077	469.93	414.11	6.2909	285	0.6842	533.92	459.87	6.5485
216	0.9035	470.84	414.77	6.2951	286	0.6818	534.84	460.53	6.5517
217	0.8993	471.75	415.42	6.2993	287	0.6794	535.75	461.19	6.5549
218	0.8951	472.67	416.07	6.3035	288	0.6771	536.67	461.85	6.5581
219	0.8910	473.58	416.72	6.3077	289	0.6747	537.59	462.50	6.5613
220	0.8870	474.49	417.37	6.3118	290	0.6724	538.51	463.16	6.5644
221	0.8830	475.40	418.03	6.3160	291	0.6701	539.42	463.82	6.5676
222	0.8790	476.32	418.68	6.3201	292	0.6678	540.34	464.47	6.5707
223	0.8750	477.23	419.33	6.3242	293	0.6655	541.26	465.13	6.5739
224	0.8711	478.14	419.98	6.3283	294	0.6632	542.18	465.79	6.5770
225	0.8672	479.06	420.63	6.3323	295	0.6610	543.10	466.45	6.5801
226	0.8633	479.97	421.29	6.3364	296	0.6587	544.02	467.11	6.5832
227	0.8595	480.88	421.94	6.3404	297	0.6565	544.93	467.77	6.5863
228	0.8557	481.79	422.59	6.3444	298	0.6543	545.85	468.42	6.5894
229	0.8520	482.71	423.24	6.3484	299	0.6521	546.77	469.08	6.5925
230	0.8483	483.62	423.90	6.3524	300	0.6499	547.69	469.74	6.5956

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TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
					91	2.6187	356.16	332.94	5.4538
					92	2.5888	357.09	333.60	5.4640
					93	2.5596	358.01	334.26	5.4740
					94	2.5311	358.94	334.92	5.4839
					95	2.5032	359.87	335.58	5.4937
					96	2.4759	360.80	336.24	5.5034
					97	2.4493	361.72	336.90	5.5130
					98	2.4232	362.65	337.56	5.5225
					99	2.3977	363.57	338.22	5.5320
					100	2.3728	364.50	338.88	5.5413
					101	2.3484	365.43	339.54	5.5505
					102	2.3244	366.35	340.20	5.5596
					103	2.3010	367.28	340.86	5.5686
					104	2.2781	368.20	341.51	5.5775
					105	2.2556	369.13	342.17	5.5864
					106	2.2336	370.05	342.83	5.5951
					107	2.2120	370.97	343.49	5.6038
					108	2.1909	371.90	344.15	5.6124
					109	2.1701	372.82	344.81	5.6209
					110	2.1498	373.74	345.46	5.6293
					111	2.1298	374.67	346.12	5.6377
					112	2.1102	375.59	346.78	5.6460
					113	2.0910	376.51	347.44	5.6542
					114	2.0722	377.43	348.09	5.6623
					115	2.0536	378.35	348.75	5.6703
					116	2.0354	379.28	349.41	5.6783
					117	2.0176	380.20	350.06	5.6862
					118	2.0000	381.12	350.72	5.6941
					119	1.9828	382.04	351.38	5.7018
					120	1.9659	382.96	352.03	5.7095
					121	1.9492	383.88	352.69	5.7172
					122	1.9329	384.80	353.35	5.7247
					123	1.9168	385.72	354.00	5.7323
					124	1.9010	386.64	354.66	5.7397
55	1302.8	86.022	85.976	2.1742	125	1.8855	387.56	355.31	5.7471
56	1298.2	87.428	87.381	2.1995	126	1.8702	388.48	355.97	5.7544
57	1293.5	88.840	88.793	2.2245	127	1.8551	389.40	356.62	5.7617
58	1288.9	90.260	90.213	2.2492	128	1.8403	390.31	357.28	5.7689
59	1284.2	91.688	91.640	2.2736	129	1.8258	391.23	357.94	5.7760
60	1279.6	93.123	93.075	2.2977	130	1.8115	392.15	358.59	5.7831
61	1275.0	94.565	94.517	2.3216	131	1.7974	393.07	359.25	5.7902
62	1270.3	96.015	95.967	2.3451	132	1.7835	393.99	359.90	5.7971
63	1265.7	97.473	97.425	2.3685	133	1.7698	394.91	360.56	5.8041
64	1261.1	98.939	98.891	2.3915	134	1.7564	395.82	361.21	5.8109
65	1256.5	100.41	100.36	2.4144	135	1.7431	396.74	361.86	5.8178
66	1251.9	101.90	101.85	2.4370	136	1.7301	397.66	362.52	5.8245
67	1247.2	103.39	103.34	2.4595	137	1.7173	398.58	363.17	5.8313
68	1242.6	104.89	104.84	2.4817	138	1.7046	399.49	363.83	5.8379
69	1238.0	106.40	106.35	2.5037	139	1.6921	400.41	364.48	5.8445
70	1233.4	107.92	107.87	2.5256	140	1.6799	401.33	365.14	5.8511
71	1228.8	109.44	109.39	2.5473	141	1.6678	402.24	365.79	5.8576
72	1224.3	110.98	110.93	2.5688	142	1.6558	403.16	366.45	5.8641
73	1219.7	112.53	112.48	2.5901	143	1.6441	404.08	367.10	5.8706
74	1215.1	114.09	114.04	2.6113	144	1.6325	404.99	367.75	5.8769
75	1210.5	115.66	115.61	2.6324	145	1.6211	405.91	368.41	5.8833
76	1205.9	117.24	117.19	2.6533	146	1.6098	406.83	369.06	5.8896
77	1201.4	118.83	118.78	2.6741	147	1.5987	407.74	369.71	5.8958
78	1196.8	120.43	120.38	2.6947	148	1.5877	408.66	370.37	5.9020
79	1192.3	122.04	121.99	2.7153	149	1.5769	409.57	371.02	5.9082
80	1187.7	123.66	123.61	2.7356	150	1.5663	410.49	371.68	5.9143
81	1183.1	125.29	125.24	2.7559					
82	1178.6	126.93	126.88	2.7761	151	1.5558	411.41	372.33	5.9204
83	1174.1	128.59	128.53	2.7961	152	1.5454	412.32	372.98	5.9265
84	1169.5	130.25	130.20	2.8160	153	1.5352	413.24	373.64	5.9325
85	1165.0	131.92	131.87	2.8358	154	1.5251	414.15	374.29	5.9384
• 85.595	1162.4	132.92	132.87	2.8475	155	1.5151	415.07	374.94	5.9444
• 85.595	2.7936	351.14	329.37	5.3969	156	1.5053	415.98	375.60	5.9502
86	2.7797	351.51	329.64	5.4013	157	1.4956	416.90	376.25	5.9561
87	2.7458	352.44	330.30	5.4121	158	1.4860	417.81	376.90	5.9619
88	2.7129	353.37	330.96	5.4227	159	1.4766	418.73	377.55	5.9677
89	2.6807	354.30	331.62	5.4332	160	1.4672	419.64	378.21	5.9734
90	2.6493	355.23	332.28	5.4436					

• PHASE CHANGE

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
161	1.4580	420.56	378.86	5.9791	231	1.0137	484.49	424.52	6.3089
162	1.4489	421.47	379.51	5.9848	232	1.0093	485.41	425.17	6.3128
163	1.4400	422.39	380.17	5.9904	233	1.0050	486.32	425.82	6.3167
164	1.4311	423.30	380.82	5.9960	234	1.0007	487.23	426.48	6.3206
165	1.4223	424.22	381.47	6.0015	235	0.9964	488.15	427.13	6.3245
166	1.4137	425.13	382.12	6.0071	236	0.9921	489.06	427.78	6.3284
167	1.4051	426.04	382.78	6.0126	237	0.9879	489.97	428.44	6.3323
168	1.3967	426.96	383.43	6.0180	238	0.9838	490.89	429.09	6.3361
169	1.3883	427.87	384.08	6.0234	239	0.9796	491.80	429.74	6.3400
170	1.3801	428.79	384.73	6.0288	240	0.9755	492.71	430.39	6.3438
171	1.3719	429.70	385.39	6.0342	241	0.9715	493.63	431.05	6.3476
172	1.3639	430.61	386.04	6.0395	242	0.9675	494.54	431.70	6.3514
173	1.3559	431.53	386.69	6.0448	243	0.9635	495.45	432.35	6.3551
174	1.3481	432.44	387.34	6.0501	244	0.9595	496.37	433.01	6.3589
175	1.3403	433.36	388.00	6.0553	245	0.9556	497.28	433.66	6.3626
176	1.3326	434.27	388.65	6.0605	246	0.9517	498.20	434.31	6.3663
177	1.3250	435.18	389.30	6.0657	247	0.9478	499.11	434.97	6.3700
178	1.3175	436.10	389.95	6.0709	248	0.9440	500.02	435.62	6.3737
179	1.3101	437.01	390.61	6.0760	249	0.9402	500.94	436.27	6.3774
180	1.3028	437.92	391.26	6.0811	250	0.9364	501.85	436.93	6.3811
181	1.2955	438.84	391.91	6.0861	251	0.9327	502.77	437.58	6.3847
182	1.2883	439.75	392.56	6.0912	252	0.9289	503.68	438.23	6.3884
183	1.2812	440.66	393.21	6.0962	253	0.9253	504.59	438.89	6.3920
184	1.2742	441.58	393.87	6.1011	254	0.9216	505.51	439.54	6.3956
185	1.2673	442.49	394.52	6.1061	255	0.9180	506.42	440.20	6.3992
186	1.2604	443.41	395.17	6.1110	256	0.9144	507.34	440.85	6.4028
187	1.2536	444.32	395.82	6.1159	257	0.9108	508.25	441.50	6.4063
188	1.2469	445.23	396.48	6.1208	258	0.9073	509.17	442.16	6.4099
189	1.2403	446.14	397.13	6.1256	259	0.9038	510.08	442.81	6.4134
190	1.2337	447.06	397.78	6.1305	260	0.9003	511.00	443.47	6.4169
191	1.2272	447.97	398.43	6.1352	261	0.8968	511.91	444.12	6.4204
192	1.2208	448.88	399.08	6.1400	262	0.8934	512.83	444.77	6.4239
193	1.2144	449.80	399.74	6.1448	263	0.8900	513.74	445.43	6.4274
194	1.2081	450.71	400.39	6.1495	264	0.8866	514.66	446.08	6.4309
195	1.2019	451.62	401.04	6.1542	265	0.8832	515.57	446.74	6.4344
196	1.1957	452.54	401.69	6.1588	266	0.8799	516.49	447.39	6.4378
197	1.1896	453.45	402.34	6.1635	267	0.8766	517.40	448.05	6.4412
198	1.1835	454.36	403.00	6.1681	268	0.8733	518.32	448.70	6.4447
199	1.1776	455.28	403.65	6.1727	269	0.8701	519.23	449.36	6.4481
200	1.1716	456.19	404.30	6.1773	270	0.8668	520.15	450.01	6.4515
201	1.1658	457.10	404.95	6.1818	271	0.8636	521.06	450.67	6.4549
202	1.1600	458.02	405.60	6.1864	272	0.8605	521.98	451.32	6.4582
203	1.1542	458.93	406.26	6.1909	273	0.8573	522.89	451.98	6.4616
204	1.1485	459.84	406.91	6.1954	274	0.8542	523.81	452.63	6.4649
205	1.1429	460.75	407.56	6.1998	275	0.8510	524.73	453.29	6.4683
206	1.1373	461.67	408.21	6.2043	276	0.8480	525.64	453.95	6.4716
207	1.1318	462.58	408.86	6.2087	277	0.8449	526.56	454.60	6.4749
208	1.1263	463.49	409.52	6.2131	278	0.8418	527.48	455.26	6.4782
209	1.1209	464.41	410.17	6.2175	279	0.8388	528.39	455.91	6.4815
210	1.1155	465.32	410.82	6.2218	280	0.8358	529.31	456.57	6.4848
211	1.1102	466.23	411.47	6.2262	281	0.8328	530.22	457.23	6.4881
212	1.1050	467.14	412.12	6.2305	282	0.8299	531.14	457.88	6.4913
213	1.0998	468.06	412.78	6.2348	283	0.8269	532.06	458.54	6.4946
214	1.0946	468.97	413.43	6.2391	284	0.8240	532.98	459.20	6.4978
215	1.0895	469.88	414.08	6.2433	285	0.8211	533.89	459.85	6.5010
216	1.0844	470.80	414.73	6.2476	286	0.8182	534.81	460.51	6.5042
217	1.0794	471.71	415.39	6.2518	287	0.8154	535.73	461.17	6.5074
218	1.0744	472.62	416.04	6.2560	288	0.8125	536.65	461.82	6.5106
219	1.0695	473.54	416.69	6.2601	289	0.8097	537.56	462.48	6.5138
220	1.0646	474.45	417.34	6.2643	290	0.8069	538.48	463.14	6.5170
221	1.0598	475.36	417.99	6.2684	291	0.8042	539.40	463.80	6.5201
222	1.0550	476.27	418.65	6.2726	292	0.8014	540.32	464.45	6.5233
223	1.0502	477.19	419.30	6.2767	293	0.7987	541.23	465.11	6.5264
224	1.0455	478.10	419.95	6.2808	294	0.7959	542.15	465.77	6.5296
225	1.0408	479.01	420.60	6.2848	295	0.7932	543.07	466.43	6.5327
226	1.0362	479.93	421.26	6.2889	296	0.7905	543.99	467.09	6.5358
227	1.0316	480.84	421.91	6.2929	297	0.7879	544.91	467.75	6.5389
228	1.0271	481.75	422.56	6.2969	298	0.7852	545.83	468.40	6.5420
229	1.0226	482.67	423.21	6.3009	299	0.7826	546.75	469.06	6.5451
230	1.0181	483.58	423.87	6.3049	300	0.7800	547.67	469.72	6.5481

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
					91	3.0650	355.96	332.82	5.4124
					92	3.0297	356.89	333.48	5.4225
					93	2.9952	357.82	334.14	5.4326
					94	2.9615	358.75	334.80	5.4426
					95	2.9287	359.68	335.46	5.4524
					96	2.8965	360.61	336.12	5.4621
					97	2.8651	361.54	336.79	5.4718
					98	2.8344	362.47	337.45	5.4813
					99	2.8044	363.40	338.11	5.4907
					100	2.7750	364.33	338.77	5.5001
					101	2.7463	365.26	339.43	5.5093
					102	2.7181	366.18	340.09	5.5185
					103	2.6906	367.11	340.75	5.5275
					104	2.6636	368.04	341.41	5.5365
					105	2.6371	368.97	342.07	5.5453
					106	2.6113	369.89	342.73	5.5541
					107	2.5859	370.82	343.39	5.5628
					108	2.5610	371.75	344.05	5.5714
					109	2.5366	372.67	344.71	5.5800
					110	2.5127	373.60	345.37	5.5884
					111	2.4893	374.52	346.03	5.5968
					112	2.4663	375.45	346.69	5.6051
					113	2.4437	376.37	347.34	5.6133
					114	2.4215	377.29	348.00	5.6214
					115	2.3998	378.22	348.66	5.6295
					116	2.3784	379.14	349.32	5.6375
					117	2.3575	380.06	349.98	5.6454
					118	2.3369	380.99	350.64	5.6533
					119	2.3167	381.91	351.29	5.6611
					120	2.2968	382.83	351.95	5.6688
					121	2.2773	383.75	352.61	5.6764
					122	2.2581	384.68	353.27	5.6840
					123	2.2393	385.60	353.92	5.6915
					124	2.2207	386.52	354.58	5.6990
55	1302.9	86.029	85.974	2.1742	125	2.2025	387.44	355.24	5.7064
56	1298.2	87.434	87.379	2.1995	126	2.1846	388.36	355.89	5.7137
57	1293.5	88.847	88.792	2.2245	127	2.1669	389.28	356.55	5.7210
58	1288.9	90.267	90.212	2.2492	128	2.1496	390.20	357.21	5.7282
59	1284.3	91.694	91.639	2.2736	129	2.1326	391.12	357.86	5.7354
60	1279.6	93.129	93.073	2.2977	130	2.1158	392.04	358.52	5.7425
61	1275.0	94.571	94.515	2.3215	131	2.0992	392.96	359.17	5.7495
62	1270.3	96.021	95.965	2.3451	132	2.0830	393.88	359.83	5.7565
63	1265.7	97.479	97.423	2.3684	133	2.0670	394.80	360.49	5.7635
64	1261.1	98.945	98.889	2.3915	134	2.0512	395.72	361.14	5.7704
65	1256.5	100.42	100.36	2.4144	135	2.0357	396.64	361.80	5.7772
66	1251.9	101.90	101.85	2.4370	136	2.0204	397.56	362.45	5.7840
67	1247.3	103.39	103.34	2.4594	137	2.0054	398.48	363.11	5.7907
68	1242.6	104.89	104.84	2.4817	138	1.9906	399.39	363.76	5.7974
69	1238.0	106.40	106.35	2.5037	139	1.9760	400.31	364.42	5.8040
70	1233.5	107.92	107.86	2.5256	140	1.9616	401.23	365.07	5.8106
71	1228.9	109.45	109.39	2.5472	141	1.9474	402.15	365.73	5.8171
72	1224.3	110.99	110.93	2.5687	142	1.9335	403.07	366.38	5.8236
73	1219.7	112.54	112.48	2.5901	143	1.9197	403.98	367.04	5.8301
74	1215.1	114.09	114.04	2.6113	144	1.9062	404.90	367.69	5.8365
75	1210.5	115.66	115.61	2.6324	145	1.8928	405.82	368.35	5.8428
76	1206.0	117.24	117.18	2.6533	146	1.8796	406.74	369.00	5.8491
77	1201.4	118.83	118.77	2.6741	147	1.8666	407.65	369.66	5.8554
78	1196.8	120.43	120.37	2.6947	148	1.8538	408.57	370.31	5.8616
79	1192.3	122.04	121.98	2.7152	149	1.8411	409.49	370.96	5.8678
80	1187.7	123.66	123.60	2.7356	150	1.8287	410.40	371.62	5.8739
81	1183.2	125.30	125.24	2.7559					
82	1178.6	126.94	126.88	2.7760	151	1.8164	411.32	372.27	5.8800
83	1174.1	128.59	128.53	2.7961	152	1.8043	412.24	372.93	5.8860
84	1169.5	130.25	130.19	2.8160	153	1.7923	413.15	373.58	5.8920
85	1165.0	131.93	131.87	2.8358	154	1.7805	414.07	374.23	5.8980
86	1160.5	133.61	133.55	2.8555	155	1.7688	414.99	374.89	5.9039
• 86.930	1155.9	135.18	135.12	2.8737	156	1.7573	415.90	375.54	5.9098
• 86.930	3.2180	352.16	330.12	5.3697	157	1.7460	416.82	376.20	5.9157
87	3.2152	352.23	330.17	5.3705	158	1.7348	417.73	376.85	5.9215
88	3.1762	353.16	330.83	5.3811	159	1.7237	418.65	377.50	5.9273
89	3.1382	354.09	331.49	5.3916	160	1.7128	419.57	378.16	5.9330
90	3.1011	355.03	332.15	5.4021					

• PHASE CHANGE

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
161	1.7020	420.48	378.81	5.9387	231	1.1829	484.45	424.49	6.2687
162	1.6914	421.40	379.46	5.9444	232	1.1777	485.37	425.14	6.2726
163	1.6809	422.31	380.12	5.9500	233	1.1727	486.28	425.80	6.2765
164	1.6705	423.23	380.77	5.9556	234	1.1676	487.19	426.45	6.2805
165	1.6603	424.14	381.42	5.9612	235	1.1626	488.11	427.10	6.2844
166	1.6502	425.06	382.08	5.9667	236	1.1577	489.02	427.75	6.2882
167	1.6402	425.97	382.73	5.9722	237	1.1528	489.94	428.41	6.2921
168	1.6303	426.89	383.38	5.9777	238	1.1479	490.85	429.06	6.2959
169	1.6205	427.80	384.04	5.9831	239	1.1431	491.76	429.71	6.2998
170	1.6109	428.72	384.69	5.9885	240	1.1383	492.68	430.37	6.3036
171	1.6014	429.63	385.34	5.9939	241	1.1336	493.59	431.02	6.3074
172	1.5920	430.55	385.99	5.9992	242	1.1289	494.50	431.67	6.3112
173	1.5827	431.46	386.65	6.0045	243	1.1242	495.42	432.33	6.3149
174	1.5735	432.38	387.30	6.0098	244	1.1196	496.33	432.98	6.3187
175	1.5644	433.29	387.95	6.0150	245	1.1150	497.25	433.63	6.3224
176	1.5554	434.21	388.61	6.0202	246	1.1104	498.16	434.29	6.3262
177	1.5466	435.12	389.26	6.0254	247	1.1059	499.07	434.94	6.3299
178	1.5378	436.03	389.91	6.0306	248	1.1014	499.99	435.59	6.3336
179	1.5291	436.95	390.56	6.0357	249	1.0970	500.90	436.25	6.3372
180	1.5205	437.86	391.22	6.0408	250	1.0926	501.82	436.90	6.3409
181	1.5121	438.78	391.87	6.0458	251	1.0882	502.73	437.55	6.3446
182	1.5037	439.69	392.52	6.0509	252	1.0839	503.65	438.21	6.3482
183	1.4954	440.60	393.17	6.0559	253	1.0796	504.56	438.86	6.3518
184	1.4872	441.52	393.83	6.0609	254	1.0753	505.48	439.52	6.3554
185	1.4791	442.43	394.48	6.0658	255	1.0711	506.39	440.17	6.3590
186	1.4711	443.35	395.13	6.0707	256	1.0669	507.30	440.82	6.3626
187	1.4631	444.26	395.78	6.0756	257	1.0627	508.22	441.48	6.3662
188	1.4553	445.17	396.44	6.0805	258	1.0586	509.13	442.13	6.3697
189	1.4475	446.09	397.09	6.0854	259	1.0545	510.05	442.79	6.3733
190	1.4398	447.00	397.74	6.0902	260	1.0504	510.96	443.44	6.3768
191	1.4322	447.92	398.39	6.0950	261	1.0464	511.88	444.10	6.3803
192	1.4247	448.83	399.05	6.0998	262	1.0424	512.79	444.75	6.3838
193	1.4173	449.74	399.70	6.1045	263	1.0384	513.71	445.41	6.3873
194	1.4099	450.66	400.35	6.1092	264	1.0345	514.62	446.06	6.3908
195	1.4026	451.57	401.00	6.1139	265	1.0306	515.54	446.71	6.3942
196	1.3954	452.48	401.65	6.1186	266	1.0267	516.46	447.37	6.3977
197	1.3883	453.40	402.31	6.1232	267	1.0228	517.37	448.02	6.4011
198	1.3812	454.31	402.96	6.1279	268	1.0190	518.29	448.68	6.4045
199	1.3742	455.22	403.61	6.1325	269	1.0152	519.20	449.33	6.4079
200	1.3673	456.14	404.26	6.1370	270	1.0114	520.12	449.99	6.4113
201	1.3605	457.05	404.92	6.1416	271	1.0077	521.03	450.65	6.4147
202	1.3537	457.96	405.57	6.1461	272	1.0040	521.95	451.30	6.4181
203	1.3470	458.88	406.22	6.1506	273	1.0003	522.87	451.96	6.4214
204	1.3403	459.79	406.87	6.1551	274	0.9966	523.78	452.61	6.4248
205	1.3337	460.70	407.53	6.1596	275	0.9930	524.70	453.27	6.4281
206	1.3272	461.62	408.18	6.1640	276	0.9894	525.61	453.92	6.4315
207	1.3208	462.53	408.83	6.1685	277	0.9858	526.53	454.58	6.4348
208	1.3144	463.45	409.48	6.1729	278	0.9822	527.45	455.24	6.4381
209	1.3081	464.36	410.14	6.1773	279	0.9787	528.36	455.89	6.4414
210	1.3018	465.27	410.79	6.1816	280	0.9752	529.28	456.55	6.4446
211	1.2956	466.19	411.44	6.1860	281	0.9717	530.20	457.20	6.4479
212	1.2894	467.10	412.09	6.1903	282	0.9683	531.11	457.86	6.4512
213	1.2834	468.01	412.74	6.1946	283	0.9648	532.03	458.52	6.4544
214	1.2773	468.93	413.40	6.1988	284	0.9614	532.95	459.17	6.4577
215	1.2713	469.84	414.05	6.2031	285	0.9580	533.87	459.83	6.4609
216	1.2654	470.75	414.70	6.2073	286	0.9547	534.78	460.49	6.4641
217	1.2596	471.67	415.35	6.2116	287	0.9513	535.70	461.15	6.4673
218	1.2538	472.58	416.01	6.2158	288	0.9480	536.62	461.80	6.4705
219	1.2480	473.49	416.66	6.2199	289	0.9447	537.54	462.46	6.4737
220	1.2423	474.41	417.31	6.2241	290	0.9415	538.45	463.12	6.4768
221	1.2366	475.32	417.96	6.2282	291	0.9382	539.37	463.78	6.4800
222	1.2310	476.23	418.62	6.2324	292	0.9350	540.29	464.43	6.4832
223	1.2255	477.15	419.27	6.2365	293	0.9318	541.21	465.09	6.4863
224	1.2200	478.06	419.92	6.2406	294	0.9286	542.13	465.75	6.4894
225	1.2146	478.97	420.57	6.2446	295	0.9255	543.05	466.41	6.4925
226	1.2092	479.89	421.23	6.2487	296	0.9224	543.97	467.07	6.4957
227	1.2038	480.80	421.88	6.2527	297	0.9192	544.88	467.73	6.4988
228	1.1985	481.71	422.53	6.2567	298	0.9161	545.80	468.38	6.5018
229	1.1932	482.63	423.18	6.2607	299	0.9131	546.72	469.04	6.5049
230	1.1880	483.54	423.84	6.2647	300	0.9100	547.64	469.70	6.5080

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TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
					91	3.5142	355.76	332.69	5.3762
					92	3.4733	356.69	333.35	5.3865
					93	3.4335	357.62	334.02	5.3966
					94	3.3946	358.56	334.68	5.4066
					95	3.3566	359.49	335.34	5.4164
					96	3.3195	360.43	336.01	5.4262
					97	3.2832	361.36	336.67	5.4359
					98	3.2478	362.29	337.33	5.4454
					99	3.2131	363.22	338.00	5.4549
					100	3.1792	364.15	338.66	5.4643
					101	3.1461	365.09	339.32	5.4735
					102	3.1136	366.02	339.98	5.4827
					103	3.0819	366.95	340.64	5.4918
					104	3.0508	367.88	341.31	5.5008
					105	3.0203	368.81	341.97	5.5097
					106	2.9905	369.74	342.63	5.5185
					107	2.9613	370.66	343.29	5.5272
					108	2.9326	371.59	343.95	5.5358
					109	2.9045	372.52	344.61	5.5444
					110	2.8770	373.45	345.27	5.5528
					111	2.8500	374.38	345.93	5.5612
					112	2.8236	375.30	346.59	5.5695
					113	2.7976	376.23	347.25	5.5778
					114	2.7721	377.15	347.91	5.5859
					115	2.7471	378.08	348.57	5.5940
					116	2.7226	379.01	349.23	5.6020
					117	2.6985	379.93	349.89	5.6100
					118	2.6748	380.86	350.55	5.6178
					119	2.6515	381.78	351.21	5.6256
					120	2.6287	382.70	351.87	5.6334
					121	2.6063	383.63	352.53	5.6410
					122	2.5842	384.55	353.18	5.6486
					123	2.5626	385.48	353.84	5.6562
					124	2.5413	386.40	354.50	5.6637
55	1302.9	86.035	85.973	2.1741	125	2.5204	387.32	355.16	5.6711
56	1298.2	87.440	87.378	2.1994	126	2.4998	388.24	355.82	5.6784
57	1293.6	88.853	88.790	2.2245	127	2.4795	389.17	356.47	5.6857
58	1288.9	90.273	90.210	2.2491	128	2.4596	390.09	357.13	5.6929
59	1284.3	91.700	91.637	2.2735	129	2.4400	391.01	357.79	5.7001
60	1279.6	93.135	93.072	2.2977	130	2.4208	391.93	358.45	5.7072
61	1275.0	94.577	94.514	2.3215	131	2.4018	392.85	359.10	5.7143
62	1270.4	96.027	95.963	2.3451	132	2.3831	393.77	359.76	5.7213
63	1265.7	97.485	97.421	2.3684	133	2.3648	394.69	360.42	5.7282
64	1261.1	98.951	98.887	2.3915	134	2.3467	395.61	361.07	5.7351
65	1256.5	100.43	100.36	2.4143	135	2.3289	396.54	361.73	5.7420
66	1251.9	101.91	101.84	2.4370	136	2.3114	397.46	362.39	5.7488
67	1247.3	103.40	103.33	2.4594	137	2.2941	398.38	363.04	5.7555
68	1242.7	104.90	104.83	2.4816	138	2.2771	399.29	363.70	5.7622
69	1238.1	106.41	106.34	2.5037	139	2.2604	400.21	364.35	5.7688
70	1233.5	107.93	107.86	2.5255	140	2.2439	401.13	365.01	5.7754
71	1228.9	109.46	109.39	2.5472	141	2.2276	402.05	365.66	5.7820
72	1224.3	110.99	110.93	2.5687	142	2.2116	402.97	366.32	5.7885
73	1219.7	112.54	112.48	2.5901	143	2.1958	403.89	366.98	5.7949
74	1215.1	114.10	114.03	2.6113	144	2.1803	404.81	367.63	5.8013
75	1210.5	115.67	115.60	2.6323	145	2.1649	405.73	368.29	5.8077
76	1206.0	117.25	117.18	2.6532	146	2.1498	406.65	368.94	5.8140
77	1201.4	118.84	118.77	2.6740	147	2.1349	407.56	369.60	5.8203
78	1196.8	120.44	120.37	2.6947	148	2.1202	408.48	370.25	5.8265
79	1192.3	122.05	121.98	2.7152	149	2.1058	409.40	370.91	5.8327
80	1187.7	123.67	123.60	2.7356	150	2.0915	410.32	371.56	5.8388
81	1183.2	125.30	125.23	2.7559					
82	1178.6	126.94	126.88	2.7760	151	2.0774	411.24	372.22	5.8449
83	1174.1	128.60	128.53	2.7960	152	2.0635	412.15	372.87	5.8510
84	1169.6	130.26	130.19	2.8160	153	2.0498	413.07	373.52	5.8570
85	1165.0	131.93	131.86	2.8358	154	2.0362	413.99	374.18	5.8629
86	1160.5	133.62	133.55	2.8554	155	2.0229	414.91	374.83	5.8689
87	1155.6	135.31	135.24	2.8750	156	2.0097	415.82	375.49	5.8748
88	1150.6	137.01	136.94	2.8945	157	1.9967	416.74	376.14	5.8806
• 88.123	1150.0	137.22	137.15	2.8969	158	1.9839	417.66	376.80	5.8865
• 88.123	3.6374	353.06	330.78	5.3462	159	1.9712	418.57	377.45	5.8922
89	3.5989	353.88	331.36	5.3555	160	1.9587	419.49	378.10	5.8980
90	3.5560	354.82	332.02	5.3659					

• PHASE CHANGE

TEMPER- ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER- ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
161	1.9464	420.41	378.76	5.9037	231	1.3521	484.41	424.46	6.2338
162	1.9342	421.32	379.41	5.9094	232	1.3462	485.33	425.11	6.2378
163	1.9221	422.24	380.07	5.9150	233	1.3404	486.24	425.77	6.2417
164	1.9102	423.15	380.72	5.9206	234	1.3347	487.16	426.42	6.2456
165	1.8985	424.07	381.37	5.9262	235	1.3289	488.07	427.07	6.2495
166	1.8869	424.99	382.03	5.9317	236	1.3233	488.98	427.73	6.2534
167	1.8755	425.90	382.68	5.9372	237	1.3177	489.90	428.38	6.2573
168	1.8642	426.82	383.33	5.9427	238	1.3121	490.81	429.03	6.2611
169	1.8530	427.73	383.99	5.9481	239	1.3066	491.73	429.69	6.2650
170	1.8420	428.65	384.64	5.9535	240	1.3011	492.64	430.34	6.2688
171	1.8311	429.56	385.29	5.9589	241	1.2957	493.55	430.99	6.2726
172	1.8203	430.48	385.95	5.9642	242	1.2903	494.47	431.65	6.2764
173	1.8096	431.40	386.60	5.9695	243	1.2850	495.38	432.30	6.2801
174	1.7991	432.31	387.25	5.9748	244	1.2797	496.30	432.95	6.2839
175	1.7887	433.23	387.91	5.9801	245	1.2745	497.21	433.61	6.2876
176	1.7784	434.14	388.56	5.9853	246	1.2692	498.13	434.26	6.2913
177	1.7683	435.06	389.21	5.9905	247	1.2641	499.04	434.91	6.2951
178	1.7582	435.97	389.87	5.9956	248	1.2590	499.95	435.57	6.2988
179	1.7483	436.89	390.52	6.0007	249	1.2539	500.87	436.22	6.3024
180	1.7385	437.80	391.17	6.0058	250	1.2489	501.78	436.88	6.3061
181	1.7288	438.72	391.83	6.0109	251	1.2439	502.70	437.53	6.3097
182	1.7192	439.63	392.48	6.0159	252	1.2389	503.61	438.18	6.3134
183	1.7097	440.54	393.13	6.0209	253	1.2340	504.53	438.84	6.3170
184	1.7003	441.46	393.79	6.0259	254	1.2291	505.44	439.49	6.3206
185	1.6910	442.37	394.44	6.0309	255	1.2243	506.36	440.15	6.3242
186	1.6818	443.29	395.09	6.0358	256	1.2195	507.27	440.80	6.3278
187	1.6728	444.20	395.74	6.0407	257	1.2147	508.19	441.45	6.3314
188	1.6638	445.12	396.40	6.0456	258	1.2100	509.10	442.11	6.3349
189	1.6549	446.03	397.05	6.0505	259	1.2053	510.02	442.76	6.3385
190	1.6461	446.95	397.70	6.0553	260	1.2006	510.93	443.42	6.3420
191	1.6374	447.86	398.35	6.0601	261	1.1960	511.85	444.07	6.3455
192	1.6288	448.77	399.01	6.0648	262	1.1914	512.76	444.73	6.3490
193	1.6203	449.69	399.66	6.0696	263	1.1869	513.68	445.38	6.3525
194	1.6119	450.60	400.31	6.0743	264	1.1824	514.59	446.04	6.3560
195	1.6035	451.52	400.97	6.0790	265	1.1779	515.51	446.69	6.3594
196	1.5953	452.43	401.62	6.0837	266	1.1735	516.42	447.35	6.3629
197	1.5871	453.34	402.27	6.0883	267	1.1690	517.34	448.00	6.3663
198	1.5790	454.26	402.92	6.0930	268	1.1647	518.26	448.66	6.3697
199	1.5710	455.17	403.58	6.0976	269	1.1603	519.17	449.31	6.3731
200	1.5631	456.09	404.23	6.1022	270	1.1560	520.09	449.97	6.3765
201	1.5553	457.00	404.88	6.1067	271	1.1517	521.00	450.62	6.3799
202	1.5475	457.91	405.53	6.1113	272	1.1475	521.92	451.28	6.3833
203	1.5398	458.83	406.19	6.1158	273	1.1433	522.84	451.93	6.3867
204	1.5322	459.74	406.84	6.1203	274	1.1391	523.75	452.59	6.3900
205	1.5247	460.66	407.49	6.1247	275	1.1349	524.67	453.25	6.3933
206	1.5172	461.57	408.14	6.1292	276	1.1308	525.59	453.90	6.3967
207	1.5099	462.48	408.80	6.1336	277	1.1267	526.50	454.56	6.4000
208	1.5026	463.40	409.45	6.1380	278	1.1226	527.42	455.21	6.4033
209	1.4953	464.31	410.10	6.1424	279	1.1186	528.34	455.87	6.4066
210	1.4881	465.22	410.75	6.1467	280	1.1146	529.25	456.53	6.4099
211	1.4810	466.14	411.41	6.1511	281	1.1106	530.17	457.18	6.4131
212	1.4740	467.05	412.06	6.1554	282	1.1067	531.09	457.84	6.4164
213	1.4670	467.97	412.71	6.1597	283	1.1027	532.00	458.50	6.4196
214	1.4601	468.88	413.36	6.1640	284	1.0988	532.92	459.15	6.4229
215	1.4533	469.79	414.02	6.1682	285	1.0950	533.84	459.81	6.4261
216	1.4465	470.71	414.67	6.1725	286	1.0911	534.76	460.47	6.4293
217	1.4398	471.62	415.32	6.1767	287	1.0873	535.68	461.13	6.4325
218	1.4332	472.53	415.97	6.1809	288	1.0835	536.59	461.78	6.4357
219	1.4266	473.45	416.63	6.1851	289	1.0798	537.51	462.44	6.4389
220	1.4201	474.36	417.28	6.1893	290	1.0761	538.43	463.10	6.4421
221	1.4136	475.28	417.93	6.1934	291	1.0723	539.35	463.76	6.4452
222	1.4072	476.19	418.59	6.1975	292	1.0687	540.27	464.41	6.4484
223	1.4009	477.10	419.24	6.2016	293	1.0650	541.18	465.07	6.4515
224	1.3946	478.02	419.89	6.2057	294	1.0614	542.10	465.73	6.4546
225	1.3883	478.93	420.54	6.2098	295	1.0578	543.02	466.39	6.4578
226	1.3822	479.84	421.20	6.2138	296	1.0542	543.94	467.05	6.4609
227	1.3760	480.76	421.85	6.2179	297	1.0506	544.86	467.71	6.4640
228	1.3700	481.67	422.50	6.2219	298	1.0471	545.78	468.36	6.4671
229	1.3639	482.59	423.16	6.2259	299	1.0436	546.70	469.02	6.4701
230	1.3580	483.50	423.81	6.2299	300	1.0401	547.62	469.68	6.4732

TEMPER- ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER- ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
					91	3.9664	355.55	332.56	5.3442
					92	3.9199	356.49	333.23	5.3545
					93	3.8745	357.43	333.89	5.3646
					94	3.8303	358.37	334.56	5.3746
					95	3.7871	359.30	335.22	5.3845
					96	3.7449	360.24	335.89	5.3943
					97	3.7037	361.18	336.55	5.4040
					98	3.6634	362.11	337.22	5.4136
					99	3.6240	363.05	337.88	5.4231
					100	3.5855	363.98	338.55	5.4325
					101	3.5478	364.91	339.21	5.4418
					102	3.5110	365.85	339.88	5.4510
					103	3.4750	366.78	340.54	5.4601
					104	3.4397	367.71	341.20	5.4691
					105	3.4051	368.65	341.87	5.4780
					106	3.3713	369.58	342.53	5.4869
					107	3.3382	370.51	343.19	5.4956
					108	3.3057	371.44	343.85	5.5043
					109	3.2739	372.37	344.52	5.5129
					110	3.2427	373.30	345.18	5.5213
					111	3.2121	374.23	345.84	5.5298
					112	3.1821	375.16	346.50	5.5381
					113	3.1527	376.09	347.16	5.5463
					114	3.1239	377.02	347.82	5.5545
					115	3.0956	377.94	348.48	5.5626
					116	3.0678	378.87	349.14	5.5707
					117	3.0405	379.80	349.81	5.5786
					118	3.0137	380.72	350.47	5.5865
					119	2.9874	381.65	351.13	5.5943
					120	2.9616	382.58	351.79	5.6021
					121	2.9362	383.50	352.44	5.6098
					122	2.9113	384.43	353.10	5.6174
					123	2.8868	385.35	353.76	5.6249
					124	2.8627	386.28	354.42	5.6324
55	1302.9	86.041	85.971	2.1741	125	2.8390	387.20	355.08	5.6398
56	1298.2	87.446	87.376	2.1994	126	2.8158	388.13	355.74	5.6472
57	1293.6	88.859	88.789	2.2244	127	2.7929	389.05	356.40	5.6545
58	1288.9	90.279	90.208	2.2491	128	2.7704	389.97	357.06	5.6617
59	1284.3	91.706	91.635	2.2735	129	2.7482	390.90	357.71	5.6689
60	1279.6	93.141	93.070	2.2976	130	2.7265	391.82	358.37	5.6761
61	1275.0	94.583	94.512	2.3215	131	2.7050	392.74	359.03	5.6831
62	1270.4	96.033	95.962	2.3450	132	2.6840	393.67	359.69	5.6901
63	1265.7	97.491	97.419	2.3684	133	2.6632	394.59	360.35	5.6971
64	1261.1	98.957	98.885	2.3915	134	2.6428	395.51	361.00	5.7040
65	1256.5	100.43	100.36	2.4143	135	2.6227	396.43	361.66	5.7109
66	1251.9	101.91	101.84	2.4370	136	2.6029	397.35	362.32	5.7177
67	1247.3	103.41	103.33	2.4594	137	2.5834	398.27	362.97	5.7244
68	1242.7	104.91	104.83	2.4816	138	2.5642	399.20	363.63	5.7311
69	1238.1	106.42	106.34	2.5036	139	2.5453	400.12	364.29	5.7378
70	1233.5	107.93	107.86	2.5255	140	2.5267	401.04	364.94	5.7444
71	1228.9	109.46	109.39	2.5472	141	2.5083	401.96	365.60	5.7509
72	1224.3	111.00	110.93	2.5687	142	2.4902	402.88	366.26	5.7574
73	1219.7	112.55	112.47	2.5900	143	2.4724	403.80	366.91	5.7639
74	1215.1	114.11	114.03	2.6112	144	2.4549	404.72	367.57	5.7703
75	1210.6	115.68	115.60	2.6323	145	2.4376	405.64	368.23	5.7766
76	1206.0	117.25	117.18	2.6532	146	2.4205	406.56	368.88	5.7830
77	1201.4	118.84	118.77	2.6740	147	2.4037	407.48	369.54	5.7892
78	1196.9	120.44	120.37	2.6946	148	2.3871	408.40	370.19	5.7955
79	1192.3	122.06	121.98	2.7152	149	2.3708	409.31	370.85	5.8017
80	1187.8	123.68	123.60	2.7356	150	2.3546	410.23	371.50	5.8078
81	1183.2	125.31	125.23	2.7558					
82	1178.7	126.95	126.87	2.7760	151	2.3387	411.15	372.16	5.8139
83	1174.1	128.60	128.53	2.7960	152	2.3231	412.07	372.81	5.8200
84	1169.6	130.27	130.19	2.8159	153	2.3076	412.99	373.47	5.8260
85	1165.0	131.94	131.86	2.8357	154	2.2923	413.91	374.12	5.8320
86	1160.5	133.62	133.54	2.8554	155	2.2773	414.82	374.78	5.8379
87	1155.6	135.31	135.24	2.8750	156	2.2624	415.74	375.43	5.8438
88	1150.7	137.02	136.94	2.8944	157	2.2477	416.66	376.09	5.9497
89	1145.7	138.73	138.65	2.9138	158	2.2333	417.58	376.74	5.8555
• 89.205	1144.6	139.08	139.00	2.9177	159	2.2190	418.50	377.40	5.8613
• 89.205	4.0528	353.87	331.37	5.3255	160	2.2049	419.41	378.05	5.8671
90	4.0140	354.61	331.90	5.3338					

• PHASE CHANGE

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
161	2.1909	420.33	378.71	5.8728	231	1.5214	484.37	424.43	6.2031
162	2.1772	421.25	379.36	5.8784	232	1.5148	485.29	425.09	6.2071
163	2.1636	422.16	380.02	5.8841	233	1.5082	486.20	425.74	6.2110
164	2.1502	423.08	380.67	5.8897	234	1.5017	487.12	426.39	6.2149
165	2.1370	424.00	381.32	5.8953	235	1.4953	488.03	427.05	6.2188
166	2.1239	424.91	381.98	5.9008	236	1.4889	488.95	427.70	6.2227
167	2.1110	425.83	382.63	5.9063	237	1.4826	489.86	428.35	6.2265
168	2.0983	426.75	383.29	5.9118	238	1.4764	490.77	429.01	6.2304
169	2.0857	427.66	383.94	5.9172	239	1.4701	491.69	429.66	6.2342
170	2.0732	428.58	384.59	5.9226	240	1.4640	492.60	430.31	6.2380
171	2.0609	429.50	385.25	5.9280	241	1.4579	493.52	430.97	6.2418
172	2.0488	430.41	385.90	5.9333	242	1.4518	494.43	431.62	6.2456
173	2.0368	431.33	386.56	5.9387	243	1.4458	495.35	432.27	6.2494
174	2.0249	432.24	387.21	5.9439	244	1.4399	496.26	432.93	6.2532
175	2.0132	433.16	387.86	5.9492	245	1.4340	497.18	433.58	6.2569
176	2.0016	434.08	388.52	5.9544	246	1.4281	498.09	434.23	6.2606
177	1.9902	434.99	389.17	5.9596	247	1.4223	499.00	434.89	6.2643
178	1.9789	435.91	389.82	5.9648	248	1.4165	499.92	435.54	6.2680
179	1.9677	436.82	390.48	5.9699	249	1.4108	500.83	436.20	6.2717
180	1.9566	437.74	391.13	5.9750	250	1.4051	501.75	436.85	6.2754
181	1.9457	438.65	391.78	5.9801	251	1.3995	502.66	437.50	6.2790
182	1.9349	439.57	392.44	5.9851	252	1.3939	503.58	438.16	6.2827
183	1.9242	440.48	393.09	5.9901	253	1.3884	504.49	438.81	6.2863
184	1.9136	441.40	393.74	5.9951	254	1.3829	505.41	439.47	6.2899
185	1.9031	442.31	394.40	6.0001	255	1.3775	506.32	440.12	6.2935
186	1.8928	443.23	395.05	6.0050	256	1.3721	507.24	440.78	6.2971
187	1.8825	444.14	395.70	6.0099	257	1.3667	508.15	441.43	6.3007
188	1.8724	445.06	396.36	6.0148	258	1.3614	509.07	442.08	6.3042
189	1.8624	445.97	397.01	6.0196	259	1.3561	509.99	442.74	6.3077
190	1.8525	446.89	397.66	6.0245	260	1.3509	510.90	443.39	6.3113
191	1.8427	447.80	398.32	6.0293	261	1.3457	511.82	444.05	6.3148
192	1.8330	448.72	398.97	6.0340	262	1.3405	512.73	444.70	6.3183
193	1.8234	449.63	399.62	6.0388	263	1.3354	513.65	445.36	6.3218
194	1.8139	450.55	400.27	6.0435	264	1.3303	514.56	446.01	6.3253
195	1.8045	451.46	400.93	6.0482	265	1.3253	515.48	446.67	6.3287
196	1.7953	452.38	401.58	6.0529	266	1.3203	516.39	447.32	6.3322
197	1.7861	453.29	402.23	6.0575	267	1.3153	517.31	447.98	6.3356
198	1.7770	454.21	402.89	6.0622	268	1.3104	518.23	448.63	6.3390
199	1.7679	455.12	403.54	6.0668	269	1.3055	519.14	449.29	6.3424
200	1.7590	456.04	404.19	6.0714	270	1.3006	520.06	449.94	6.3458
201	1.7502	456.95	404.85	6.0759	271	1.2958	520.97	450.60	6.3492
202	1.7415	457.86	405.50	6.0805	272	1.2910	521.89	451.26	6.3526
203	1.7328	458.78	406.15	6.0850	273	1.2863	522.81	451.91	6.3560
204	1.7242	459.69	406.80	6.0895	274	1.2816	523.72	452.57	6.3593
205	1.7158	460.61	407.46	6.0939	275	1.2769	524.64	453.22	6.3627
206	1.7074	461.52	408.11	6.0984	276	1.2723	525.56	453.88	6.3660
207	1.6990	462.44	408.76	6.1028	277	1.2676	526.47	454.54	6.3693
208	1.6908	463.35	409.41	6.1072	278	1.2631	527.39	455.19	6.3726
209	1.6827	464.26	410.07	6.1116	279	1.2585	528.31	455.85	6.3759
210	1.6746	465.18	410.72	6.1160	280	1.2540	529.23	456.51	6.3792
211	1.6666	466.09	411.37	6.1203	281	1.2495	530.14	457.16	6.3824
212	1.6587	467.01	412.03	6.1246	282	1.2451	531.06	457.82	6.3857
213	1.6508	467.92	412.68	6.1289	283	1.2407	531.98	458.48	6.3890
214	1.6430	468.83	413.33	6.1332	284	1.2363	532.90	459.13	6.3922
215	1.6353	469.75	413.98	6.1375	285	1.2319	533.81	459.79	6.3954
216	1.6277	470.66	414.64	6.1417	286	1.2276	534.73	460.45	6.3986
217	1.6202	471.58	415.29	6.1460	287	1.2233	535.65	461.10	6.4018
218	1.6127	472.49	415.94	6.1502	288	1.2191	536.57	461.76	6.4050
219	1.6053	473.40	416.60	6.1543	289	1.2148	537.49	462.42	6.4082
220	1.5979	474.32	417.25	6.1585	290	1.2106	538.40	463.08	6.4114
221	1.5906	475.23	417.90	6.1626	291	1.2065	539.32	463.74	6.4145
222	1.5834	476.15	418.56	6.1668	292	1.2023	540.24	464.39	6.4177
223	1.5763	477.06	419.21	6.1709	293	1.1982	541.16	465.05	6.4208
224	1.5692	477.98	419.86	6.1750	294	1.1941	542.08	465.71	6.4240
225	1.5622	478.89	420.51	6.1790	295	1.1901	543.00	466.37	6.4271
226	1.5552	479.80	421.17	6.1831	296	1.1860	543.92	467.03	6.4302
227	1.5483	480.72	421.82	6.1871	297	1.1820	544.84	467.69	6.4333
228	1.5415	481.63	422.47	6.1912	298	1.1780	545.75	468.34	6.4364
229	1.5347	482.55	423.13	6.1952	299	1.1741	546.67	469.00	6.4395
230	1.5280	483.46	423.78	6.1991	300	1.1702	547.59	469.66	6.4425

TEMPER- ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER- ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
					• 90.198	1139.6	140.80	140.71	2.9368
					• 90.198	4.4645	354.59	331.90	5.3070
					91	4.4217	355.35	332.43	5.3154
					92	4.3694	356.29	333.10	5.3257
					93	4.3184	357.23	333.77	5.3358
					94	4.2686	358.17	334.44	5.3459
					95	4.2201	359.11	335.10	5.3559
					96	4.1727	360.05	335.77	5.3657
					97	4.1264	360.99	336.44	5.3754
					98	4.0812	361.93	337.10	5.3851
					99	4.0370	362.87	337.77	5.3946
					100	3.9938	363.81	338.44	5.4040
					101	3.9516	364.74	339.10	5.4133
					102	3.9103	365.68	339.77	5.4226
					103	3.8699	366.61	340.43	5.4317
					104	3.8304	367.55	341.10	5.4407
					105	3.7917	368.48	341.76	5.4497
					106	3.7538	369.42	342.43	5.4585
					107	3.7167	370.35	343.09	5.4673
					108	3.6803	371.29	343.75	5.4760
					109	3.6447	372.22	344.42	5.4846
					110	3.6098	373.15	345.08	5.4931
					111	3.5756	374.08	345.74	5.5015
					112	3.5420	375.01	346.41	5.5099
					113	3.5091	375.95	347.07	5.5181
					114	3.4768	376.88	347.73	5.5263
					115	3.4452	377.81	348.39	5.5345
					116	3.4141	378.74	349.06	5.5425
					117	3.3836	379.66	349.72	5.5505
					118	3.3537	380.59	350.38	5.5584
					119	3.3243	381.52	351.04	5.5662
					120	3.2954	382.45	351.70	5.5740
					121	3.2671	383.38	352.36	5.5817
					122	3.2392	384.30	353.02	5.5893
					123	3.2119	385.23	353.68	5.5969
					124	3.1850	386.16	354.34	5.6044
55	1302.9	86.047	85.970	2.1741	125	3.1585	387.08	355.00	5.6118
56	1298.2	87.453	87.375	2.1994	126	3.1325	388.01	355.66	5.6192
57	1293.6	88.865	88.787	2.2244	127	3.1070	388.93	356.32	5.6265
58	1288.9	90.285	90.207	2.2491	128	3.0819	389.86	356.98	5.6338
59	1284.3	91.713	91.634	2.2735	129	3.0572	390.78	357.64	5.6410
60	1279.6	93.147	93.068	2.2976	130	3.0329	391.71	358.30	5.6481
61	1275.0	94.590	94.510	2.3214	131	3.0090	392.63	358.96	5.6552
62	1270.4	96.040	95.960	2.3450	132	2.9854	393.56	359.62	5.6622
63	1265.8	97.497	97.417	2.3683	133	2.9623	394.48	360.28	5.6692
64	1261.1	98.963	98.883	2.3914	134	2.9395	395.40	360.93	5.6761
65	1256.5	100.44	100.36	2.4143	135	2.9171	396.33	361.59	5.6830
66	1251.9	101.92	101.84	2.4369	136	2.8950	397.25	362.25	5.6898
67	1247.3	103.41	103.33	2.4593	137	2.8732	398.17	362.91	5.6965
68	1242.7	104.91	104.83	2.4816	138	2.8518	399.10	363.57	5.7033
69	1238.1	106.42	106.34	2.5036	139	2.8307	400.02	364.22	5.7099
70	1233.5	107.94	107.86	2.5255	140	2.8100	400.94	364.88	5.7165
71	1228.9	109.47	109.39	2.5471	141	2.7895	401.86	365.54	5.7231
72	1224.3	111.01	110.92	2.5687	142	2.7694	402.78	366.19	5.7296
73	1219.7	112.55	112.47	2.5900	143	2.7495	403.70	366.85	5.7361
74	1215.2	114.11	114.03	2.6112	144	2.7299	404.62	367.51	5.7425
75	1210.6	115.68	115.60	2.6323	145	2.7106	405.55	368.16	5.7488
76	1206.0	117.26	117.18	2.6532	146	2.6916	406.47	368.82	5.7552
77	1201.4	118.85	118.77	2.6740	147	2.6729	407.39	369.48	5.7615
78	1196.9	120.45	120.37	2.6946	148	2.6544	408.31	370.13	5.7677
79	1192.3	122.06	121.98	2.7151	149	2.6362	409.23	370.79	5.7739
80	1187.8	123.68	123.60	2.7355	150	2.6182	410.15	371.45	5.7800
81	1183.2	125.31	125.23	2.7558	151	2.6005	411.07	372.10	5.7862
82	1178.7	126.96	126.87	2.7759	152	2.5830	411.99	372.76	5.7922
83	1174.1	128.61	128.52	2.7960	153	2.5658	412.91	373.41	5.7983
84	1169.6	130.27	130.19	2.8159	154	2.5488	413.82	374.07	5.8042
85	1165.1	131.95	131.86	2.8357	155	2.5320	414.74	374.73	5.8102
86	1160.5	133.63	133.54	2.8554	156	2.5154	415.66	375.38	5.8161
87	1155.6	135.32	135.23	2.8749	157	2.4991	416.58	376.04	5.8220
88	1150.7	137.02	136.93	2.8944	158	2.4830	417.50	376.69	5.8278
89	1145.7	138.73	138.65	2.9137	159	2.4670	418.42	377.35	5.8336
90	1140.6	140.46	140.37	2.9330	160	2.4513	419.34	378.00	5.8393

• PHASE CHANGE

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
161	2.4358	420.25	378.66	5.8451	231	1.6907	484.33	424.40	6.1756
162	2.4205	421.17	379.31	5.8508	232	1.6834	485.25	425.06	6.1795
163	2.4054	422.09	379.97	5.8564	233	1.6761	486.16	425.71	6.1835
164	2.3905	423.01	380.62	5.8620	234	1.6689	487.08	426.36	6.1874
165	2.3758	423.93	381.28	5.8676	235	1.6617	487.99	427.02	6.1913
166	2.3612	424.84	381.93	5.8731	236	1.6547	488.91	427.67	6.1952
167	2.3468	425.76	382.58	5.8786	237	1.6476	489.82	428.32	6.1990
168	2.3326	426.68	383.24	5.8841	238	1.6407	490.74	428.98	6.2029
169	2.3186	427.59	383.89	5.8896	239	1.6338	491.65	429.63	6.2067
170	2.3048	428.51	384.55	5.8950	240	1.6269	492.57	430.29	6.2105
171	2.2911	429.43	385.20	5.9004	241	1.6201	493.48	430.94	6.2144
172	2.2776	430.35	385.86	5.9057	242	1.6134	494.40	431.59	6.2181
173	2.2642	431.26	386.51	5.9110	243	1.6067	495.31	432.25	6.2219
174	2.2510	432.18	387.16	5.9163	244	1.6001	496.23	432.90	6.2257
175	2.2379	433.09	387.82	5.9215	245	1.5935	497.14	433.55	6.2294
176	2.2250	434.01	388.47	5.9268	246	1.5870	498.05	434.21	6.2331
177	2.2123	434.93	389.13	5.9320	247	1.5805	498.97	434.86	6.2369
178	2.1997	435.84	389.78	5.9371	248	1.5741	499.88	435.52	6.2405
179	2.1872	436.76	390.43	5.9423	249	1.5678	500.80	436.17	6.2442
180	2.1749	437.68	391.09	5.9474	250	1.5615	501.71	436.82	6.2479
181	2.1627	438.59	391.74	5.9524	251	1.5552	502.63	437.48	6.2516
182	2.1507	439.51	392.40	5.9575	252	1.5490	503.55	438.13	6.2552
183	2.1388	440.42	393.05	5.9625	253	1.5429	504.46	438.79	6.2588
184	2.1270	441.34	393.70	5.9675	254	1.5368	505.38	439.44	6.2624
185	2.1154	442.26	394.36	5.9725	255	1.5307	506.29	440.10	6.2660
186	2.1039	443.17	395.01	5.9774	256	1.5247	507.21	440.75	6.2696
187	2.0925	444.09	395.66	5.9823	257	1.5187	508.12	441.40	6.2732
188	2.0812	445.00	396.32	5.9872	258	1.5128	509.04	442.06	6.2767
189	2.0701	445.92	396.97	5.9920	259	1.5069	509.95	442.71	6.2803
190	2.0591	446.83	397.62	5.9969	260	1.5011	510.87	443.37	6.2838
191	2.0482	447.75	398.28	6.0017	261	1.4953	511.78	444.02	6.2873
192	2.0374	448.66	398.93	6.0065	262	1.4896	512.70	444.68	6.2908
193	2.0267	449.58	399.58	6.0112	263	1.4839	513.62	445.33	6.2943
194	2.0161	450.49	400.24	6.0159	264	1.4783	514.53	445.99	6.2978
195	2.0057	451.41	400.89	6.0206	265	1.4727	515.45	446.64	6.3012
196	1.9954	452.32	401.54	6.0253	266	1.4671	516.36	447.30	6.3047
197	1.9851	453.24	402.20	6.0300	267	1.4616	517.28	447.95	6.3081
198	1.9750	454.15	402.85	6.0346	268	1.4561	518.20	448.61	6.3116
199	1.9650	455.07	403.50	6.0392	269	1.4507	519.11	449.27	6.3150
200	1.9550	455.98	404.16	6.0438	270	1.4453	520.03	449.92	6.3184
201	1.9452	456.90	404.81	6.0484	271	1.4399	520.95	450.58	6.3218
202	1.9355	457.81	405.46	6.0529	272	1.4346	521.86	451.23	6.3251
203	1.9259	458.73	406.12	6.0574	273	1.4293	522.78	451.89	6.3285
204	1.9163	459.64	406.77	6.0619	274	1.4241	523.70	452.55	6.3318
205	1.9069	460.56	407.42	6.0664	275	1.4189	524.61	453.20	6.3352
206	1.8976	461.47	408.07	6.0708	276	1.4137	525.53	453.86	6.3385
207	1.8883	462.39	408.73	6.0753	277	1.4086	526.45	454.51	6.3418
208	1.8792	463.30	409.38	6.0797	278	1.4035	527.36	455.17	6.3451
209	1.8701	464.22	410.03	6.0841	279	1.3985	528.28	455.83	6.3484
210	1.8611	465.13	410.69	6.0884	280	1.3935	529.20	456.48	6.3517
211	1.8522	466.05	411.34	6.0928	281	1.3885	530.12	457.14	6.3550
212	1.8434	466.96	411.99	6.0971	282	1.3835	531.03	457.80	6.3582
213	1.8347	467.87	412.65	6.1014	283	1.3786	531.95	458.45	6.3615
214	1.8260	468.79	413.30	6.1057	284	1.3738	532.87	459.11	6.3647
215	1.8175	469.70	413.95	6.1100	285	1.3689	533.79	459.77	6.3680
216	1.8090	470.62	414.61	6.1142	286	1.3641	534.70	460.43	6.3712
217	1.8006	471.53	415.26	6.1184	287	1.3594	535.62	461.08	6.3744
218	1.7923	472.45	415.91	6.1226	288	1.3546	536.54	461.74	6.3776
219	1.7840	473.36	416.56	6.1268	289	1.3499	537.46	462.40	6.3808
220	1.7758	474.28	417.22	6.1310	290	1.3452	538.38	463.06	6.3839
221	1.7677	475.19	417.87	6.1351	291	1.3406	539.30	463.71	6.3871
222	1.7597	476.10	418.52	6.1393	292	1.3360	540.22	464.37	6.3902
223	1.7518	477.02	419.18	6.1434	293	1.3314	541.13	465.03	6.3934
224	1.7439	477.93	419.83	6.1475	294	1.3269	542.05	465.69	6.3965
225	1.7361	478.85	420.48	6.1515	295	1.3224	542.97	466.35	6.3996
226	1.7284	479.76	421.14	6.1556	296	1.3179	543.89	467.01	6.4027
227	1.7207	480.68	421.79	6.1596	297	1.3134	544.81	467.67	6.4058
228	1.7131	481.59	422.44	6.1636	298	1.3090	545.73	468.32	6.4089
229	1.7056	482.51	423.10	6.1676	299	1.3046	546.65	468.98	6.4120
230	1.6981	483.42	423.75	6.1716	300	1.3003	547.57	469.64	6.4151

1.50 ATMOSPHERE ISOBAR

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
					91	1135.7	142.21	142.08	2.9519
					92	1130.5	143.95	143.82	2.9709
					93	1125.3	145.70	145.56	2.9898
					94	1120.1	147.45	147.32	3.0085
					• 94.253	1118.8	147.90	147.76	3.0133
					• 94.253	6.4827	357.42	333.98	5.2363
					95	6.4253	358.14	334.49	5.2438
					96	6.3501	359.10	335.16	5.2539
					97	6.2769	360.05	335.84	5.2638
					98	6.2054	361.01	336.52	5.2736
					99	6.1357	361.96	337.19	5.2833
					100	6.0676	362.92	337.87	5.2928
					101	6.0012	363.87	338.54	5.3023
					102	5.9363	364.82	339.22	5.3117
					103	5.8729	365.77	339.89	5.3210
					104	5.8109	366.72	340.56	5.3301
					105	5.7504	367.67	341.24	5.3392
					106	5.6911	368.62	341.91	5.3482
					107	5.6332	369.56	342.58	5.3571
					108	5.5765	370.51	343.25	5.3659
					109	5.5210	371.45	343.92	5.3746
					110	5.4666	372.40	344.60	5.3832
					111	5.4134	373.34	345.27	5.3918
					112	5.3613	374.29	345.94	5.4002
					113	5.3102	375.23	346.61	5.4086
					114	5.2601	376.17	347.28	5.4169
					115	5.2111	377.11	347.94	5.4251
					116	5.1630	378.05	348.61	5.4333
					117	5.1158	378.99	349.28	5.4413
					118	5.0695	379.93	349.95	5.4493
					119	5.0241	380.87	350.62	5.4572
					120	4.9795	381.80	351.28	5.4651
					121	4.9358	382.74	351.95	5.4729
					122	4.8929	383.68	352.62	5.4806
					123	4.8507	384.61	353.28	5.4882
					124	4.8093	385.55	353.95	5.4958
55	1302.9	86.079	85.962	2.1739	125	4.7686	386.48	354.61	5.5033
56	1298.3	87.484	87.367	2.1993	126	4.7287	387.42	355.28	5.5107
57	1293.6	88.896	88.779	2.2243	127	4.6894	388.35	355.94	5.5181
58	1289.0	90.316	90.198	2.2489	128	4.6508	389.29	356.61	5.5254
59	1284.3	91.744	91.625	2.2733	129	4.6129	390.22	357.27	5.5327
60	1279.7	93.178	93.060	2.2975	130	4.5756	391.15	357.93	5.5399
61	1275.1	94.621	94.501	2.3213	131	4.5389	392.08	358.60	5.5470
62	1270.4	96.070	95.951	2.3449	132	4.5028	393.01	359.26	5.5541
63	1265.8	97.528	97.408	2.3682	133	4.4674	393.95	359.92	5.5611
64	1261.2	98.994	98.874	2.3913	134	4.4325	394.88	360.59	5.5681
65	1256.6	100.47	100.35	2.4141	135	4.3981	395.81	361.25	5.5750
66	1252.0	101.95	101.83	2.4368	136	4.3643	396.74	361.91	5.5819
67	1247.4	103.44	103.32	2.4592	137	4.3311	397.66	362.57	5.5887
68	1242.8	104.94	104.82	2.4814	138	4.2983	398.59	363.23	5.5955
69	1238.2	106.45	106.33	2.5035	139	4.2661	399.52	363.90	5.6022
70	1233.6	107.97	107.85	2.5253	140	4.2344	400.45	364.56	5.6088
71	1229.0	109.50	109.37	2.5470	141	4.2031	401.38	365.22	5.6154
72	1224.4	111.04	110.91	2.5685	142	4.1724	402.31	365.88	5.6220
73	1219.8	112.58	112.46	2.5899	143	4.1421	403.23	366.54	5.6285
74	1215.2	114.14	114.02	2.6111	144	4.1122	404.16	367.20	5.6349
75	1210.7	115.71	115.59	2.6321	145	4.0828	405.09	367.86	5.6414
76	1206.1	117.29	117.16	2.6530	146	4.0538	406.01	368.52	5.6477
77	1201.5	118.88	118.75	2.6738	147	4.0252	406.94	369.18	5.6540
78	1197.0	120.48	120.35	2.6944	148	3.9971	407.86	369.84	5.6603
79	1192.4	122.09	121.96	2.7150	149	3.9693	408.79	370.50	5.6665
80	1187.9	123.71	123.58	2.7354	150	3.9420	409.71	371.16	5.6727
81	1183.3	125.34	125.22	2.7556	151	3.9150	410.64	371.82	5.6789
82	1178.8	126.99	126.86	2.7758	152	3.8884	411.56	372.48	5.6850
83	1174.2	128.64	128.51	2.7958	153	3.8622	412.49	373.14	5.6910
84	1169.7	130.30	130.17	2.8157	154	3.8363	413.41	373.79	5.6971
85	1165.2	131.97	131.84	2.8355	155	3.8108	414.34	374.45	5.7030
86	1160.6	133.66	133.52	2.8552	156	3.7856	415.26	375.11	5.7090
87	1155.7	135.35	135.22	2.8747	157	3.7608	416.18	375.77	5.7149
88	1150.8	137.05	136.92	2.8942	158	3.7363	417.11	376.43	5.7207
89	1145.8	138.76	138.63	2.9135	159	3.7121	418.03	377.09	5.7266
90	1140.8	140.48	140.35	2.9328	160	3.6882	418.95	377.74	5.7323

• PHASE CHANGE

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
161	3.6647	419.87	378.40	5.7381	231	2.5383	484.14	424.26	6.0696
162	3.6415	420.80	379.06	5.7438	232	2.5273	485.05	424.91	6.0735
163	3.6185	421.72	379.72	5.7495	233	2.5163	485.97	425.57	6.0775
164	3.5959	422.64	380.37	5.7551	234	2.5055	486.89	426.22	6.0814
165	3.5735	423.56	381.03	5.7607	235	2.4947	487.80	426.88	6.0853
166	3.5514	424.48	381.69	5.7663	236	2.4840	488.72	427.53	6.0892
167	3.5297	425.40	382.34	5.7718	237	2.4734	489.63	428.19	6.0931
168	3.5081	426.33	383.00	5.7773	238	2.4630	490.55	428.84	6.0969
169	3.4869	427.25	383.66	5.7828	239	2.4526	491.47	429.49	6.1008
170	3.4659	428.17	384.31	5.7882	240	2.4422	492.38	430.15	6.1046
171	3.4451	429.09	384.97	5.7936	241	2.4320	493.30	430.80	6.1084
172	3.4246	430.01	385.63	5.7990	242	2.4219	494.21	431.46	6.1122
173	3.4044	430.93	386.28	5.8043	243	2.4118	495.13	432.11	6.1160
174	3.3844	431.85	386.94	5.8096	244	2.4019	496.05	432.77	6.1197
175	3.3646	432.77	387.60	5.8149	245	2.3920	496.96	433.42	6.1235
176	3.3451	433.69	388.25	5.8201	246	2.3822	497.88	434.08	6.1272
177	3.3258	434.61	388.91	5.8253	247	2.3724	498.80	434.73	6.1309
178	3.3067	435.53	389.56	5.8305	248	2.3628	499.71	435.39	6.1346
179	3.2879	436.45	390.22	5.8357	249	2.3532	500.63	436.04	6.1383
180	3.2692	437.37	390.87	5.8408	250	2.3438	501.54	436.70	6.1420
181	3.2508	438.28	391.53	5.8459	251	2.3343	502.46	437.35	6.1457
182	3.2326	439.20	392.19	5.8509	252	2.3250	503.38	438.01	6.1493
183	3.2146	440.12	392.84	5.8560	253	2.3157	504.29	438.66	6.1529
184	3.1968	441.04	393.50	5.8610	254	2.3066	505.21	439.32	6.1565
185	3.1792	441.96	394.15	5.8660	255	2.2974	506.13	439.97	6.1602
186	3.1618	442.88	394.81	5.8709	256	2.2884	507.04	440.63	6.1637
187	3.1446	443.80	395.46	5.8758	257	2.2794	507.96	441.28	6.1673
188	3.1275	444.71	396.12	5.8807	258	2.2705	508.88	441.94	6.1709
189	3.1107	445.63	396.77	5.8856	259	2.2617	509.79	442.59	6.1744
190	3.0941	446.55	397.43	5.8905	260	2.2529	510.71	443.25	6.1780
191	3.0776	447.47	398.08	5.8953	261	2.2443	511.63	443.90	6.1815
192	3.0613	448.39	398.74	5.9001	262	2.2356	512.54	444.56	6.1850
193	3.0452	449.30	399.39	5.9048	263	2.2271	513.46	445.22	6.1885
194	3.0292	450.22	400.05	5.9096	264	2.2186	514.38	445.87	6.1920
195	3.0134	451.14	400.70	5.9143	265	2.2101	515.29	446.53	6.1954
196	2.9978	452.06	401.36	5.9190	266	2.2018	516.21	447.18	6.1989
197	2.9823	452.97	402.01	5.9237	267	2.1935	517.13	447.84	6.2023
198	2.9670	453.89	402.67	5.9283	268	2.1852	518.05	448.49	6.2057
199	2.9519	454.81	403.32	5.9329	269	2.1771	518.96	449.15	6.2092
200	2.9369	455.73	403.98	5.9375	270	2.1690	519.88	449.81	6.2126
201	2.9221	456.64	404.63	5.9421	271	2.1609	520.80	450.46	6.2160
202	2.9074	457.56	405.28	5.9466	272	2.1529	521.72	451.12	6.2193
203	2.8929	458.48	405.94	5.9512	273	2.1450	522.63	451.78	6.2227
204	2.8785	459.39	406.59	5.9557	274	2.1371	523.55	452.43	6.2261
205	2.8643	460.31	407.25	5.9602	275	2.1293	524.47	453.09	6.2294
206	2.8502	461.23	407.90	5.9646	276	2.1215	525.39	453.75	6.2327
207	2.8362	462.15	408.56	5.9691	277	2.1138	526.31	454.40	6.2361
208	2.8224	463.06	409.21	5.9735	278	2.1062	527.22	455.06	6.2394
209	2.8087	463.98	409.87	5.9779	279	2.0986	528.14	455.72	6.2427
210	2.7952	464.90	410.52	5.9823	280	2.0910	529.06	456.37	6.2459
211	2.7818	465.81	411.17	5.9866	281	2.0836	529.98	457.03	6.2492
212	2.7685	466.73	411.83	5.9909	282	2.0761	530.90	457.69	6.2525
213	2.7553	467.64	412.48	5.9953	283	2.0687	531.82	458.35	6.2557
214	2.7423	468.56	413.14	5.9995	284	2.0614	532.73	459.00	6.2590
215	2.7294	469.48	413.79	6.0038	285	2.0542	533.65	459.66	6.2622
216	2.7166	470.39	414.45	6.0081	286	2.0469	534.57	460.32	6.2654
217	2.7039	471.31	415.10	6.0123	287	2.0398	535.49	460.98	6.2686
218	2.6914	472.23	415.75	6.0165	288	2.0326	536.41	461.64	6.2718
219	2.6789	473.14	416.41	6.0207	289	2.0256	537.33	462.29	6.2750
220	2.6666	474.06	417.06	6.0249	290	2.0186	538.25	462.95	6.2782
221	2.6544	474.98	417.72	6.0290	291	2.0116	539.17	463.61	6.2814
222	2.6423	475.89	418.37	6.0332	292	2.0047	540.09	464.27	6.2845
223	2.6303	476.81	419.03	6.0373	293	1.9978	541.01	464.93	6.2877
224	2.6185	477.72	419.68	6.0414	294	1.9909	541.93	465.59	6.2908
225	2.6067	478.64	420.33	6.0455	295	1.9842	542.85	466.25	6.2939
226	2.5950	479.56	420.99	6.0495	296	1.9774	543.77	466.91	6.2970
227	2.5835	480.47	421.64	6.0536	297	1.9707	544.69	467.57	6.3001
228	2.5720	481.39	422.30	6.0576	298	1.9641	545.61	468.23	6.3032
229	2.5607	482.30	422.95	6.0616	299	1.9575	546.53	468.89	6.3063
230	2.5495	483.22	423.60	6.0656	300	1.9509	547.45	469.54	6.3094

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
					91	1135.8	142.24	142.06	2.9517
					92	1130.6	143.98	143.80	2.9707
					93	1125.5	145.72	145.54	2.9896
					94	1120.2	147.48	147.30	3.0083
					95	1114.9	149.24	149.06	3.0270
					96	1109.6	151.01	150.82	3.0455
					97	1104.3	152.78	152.60	3.0639
					● 97.377	1102.2	153.45	153.27	3.0708
					● 97.377	8.4542	359.45	335.48	5.1862
					98	8.3917	360.06	335.91	5.1925
					99	8.2937	361.03	336.60	5.2023
					100	8.1982	362.00	337.28	5.2121
					101	8.1051	362.97	337.97	5.2217
					102	8.0142	363.94	338.65	5.2313
					103	7.9256	364.90	339.33	5.2407
					104	7.8392	365.87	340.02	5.2500
					105	7.7547	366.83	340.70	5.2592
					106	7.6723	367.79	341.38	5.2683
					107	7.5917	368.75	342.06	5.2774
					108	7.5130	369.71	342.74	5.2863
					109	7.4360	370.67	343.42	5.2951
					110	7.3607	371.63	344.10	5.3039
					111	7.2871	372.59	344.78	5.3125
					112	7.2150	373.54	345.46	5.3211
					113	7.1445	374.50	346.13	5.3296
					114	7.0754	375.45	346.81	5.3380
					115	7.0078	376.40	347.48	5.3463
					116	6.9415	377.35	348.16	5.3545
					117	6.8765	378.30	348.83	5.3627
					118	6.8129	379.25	349.51	5.3708
					119	6.7505	380.20	350.18	5.3788
					120	6.6893	381.15	350.86	5.3867
					121	6.6293	382.10	351.53	5.3946
					122	6.5704	383.04	352.20	5.4024
					123	6.5127	383.99	352.87	5.4101
					124	6.4560	384.93	353.54	5.4177
55	1303.0	86.110	85.954	2.1738	125	6.4003	385.88	354.22	5.4253
56	1298.3	87.515	87.359	2.1991	126	6.3456	386.82	354.89	5.4328
57	1293.7	88.928	88.771	2.2241	127	6.2920	387.76	355.56	5.4403
58	1289.0	90.347	90.190	2.2488	128	6.2393	388.70	356.23	5.4477
59	1284.4	91.775	91.617	2.2732	129	6.1875	389.65	356.89	5.4550
60	1279.8	93.209	93.051	2.2973	130	6.1366	390.59	357.56	5.4622
61	1275.1	94.651	94.493	2.3212	131	6.0866	391.53	358.23	5.4695
62	1270.5	96.101	95.942	2.3447	132	6.0374	392.47	358.90	5.4766
63	1265.9	97.559	97.399	2.3681	133	5.9891	393.40	359.57	5.4837
64	1261.3	99.025	98.864	2.3911	134	5.9415	394.34	360.23	5.4907
65	1256.7	100.50	100.34	2.4140	135	5.8948	395.28	360.90	5.4977
66	1252.0	101.98	101.82	2.4366	136	5.8488	396.22	361.57	5.5046
67	1247.4	103.47	103.31	2.4590	137	5.8036	397.15	362.23	5.5114
68	1242.8	104.97	104.81	2.4813	138	5.7591	398.09	362.90	5.5182
69	1238.2	106.48	106.32	2.5033	139	5.7153	399.02	363.57	5.5250
70	1233.6	108.00	107.84	2.5252	140	5.6722	399.96	364.23	5.5317
71	1229.1	109.53	109.36	2.5468	141	5.6298	400.89	364.90	5.5384
72	1224.5	111.07	110.90	2.5683	142	5.5880	401.83	365.56	5.5450
73	1219.9	112.62	112.45	2.5897	143	5.5469	402.76	366.22	5.5515
74	1215.3	114.17	114.01	2.6109	144	5.5064	403.69	366.89	5.5580
75	1210.7	115.74	115.57	2.6320	145	5.4665	404.62	367.55	5.5645
76	1206.2	117.32	117.15	2.6529	146	5.4272	405.56	368.22	5.5709
77	1201.6	118.91	118.74	2.6736	147	5.3885	406.49	368.88	5.5772
78	1197.1	120.51	120.34	2.6943	148	5.3504	407.42	369.54	5.5835
79	1192.5	122.12	121.95	2.7148	149	5.3128	408.35	370.21	5.5898
80	1187.9	123.74	123.57	2.7352	150	5.2757	409.28	370.87	5.5960
81	1183.4	125.37	125.20	2.7555	151	5.2392	410.21	371.53	5.6022
82	1178.9	127.02	126.84	2.7756	152	5.2032	411.14	372.19	5.6083
83	1174.3	128.67	128.50	2.7956	153	5.1678	412.07	372.85	5.6144
84	1169.8	130.33	130.16	2.8156	154	5.1328	413.00	373.52	5.6205
85	1165.3	132.00	131.83	2.8354	155	5.0983	413.93	374.18	5.6265
86	1160.7	133.68	133.51	2.8550	156	5.0643	414.86	374.84	5.6325
87	1155.9	135.38	135.20	2.8746	157	5.0307	415.78	375.50	5.6384
88	1150.9	137.08	136.90	2.8940	158	4.9976	416.71	376.16	5.6443
89	1145.9	138.79	138.61	2.9134	159	4.9650	417.64	376.82	5.6501
90	1140.9	140.51	140.33	2.9326	160	4.9328	418.56	377.48	5.6559

● PHASE CHANGE

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
161	4.9010	419.49	378.14	5.6617	231	3.3874	483.94	424.11	5.9942
162	4.8696	420.42	378.80	5.6675	232	3.3726	484.86	424.77	5.9982
163	4.8387	421.34	379.46	5.6732	233	3.3580	485.77	425.43	6.0021
164	4.8081	422.27	380.12	5.6788	234	3.3434	486.69	426.08	6.0060
165	4.7780	423.20	380.78	5.6844	235	3.3290	487.61	426.74	6.0099
166	4.7482	424.12	381.44	5.6900	236	3.3148	488.53	427.39	6.0138
167	4.7188	425.05	382.10	5.6956	237	3.3006	489.44	428.05	6.0177
168	4.6898	425.97	382.76	5.7011	238	3.2866	490.36	428.70	6.0216
169	4.6612	426.90	383.42	5.7066	239	3.2726	491.28	429.36	6.0254
170	4.6329	427.82	384.08	5.7121	240	3.2588	492.20	430.01	6.0293
171	4.6049	428.74	384.74	5.7175	241	3.2452	493.11	430.67	6.0331
172	4.5773	429.67	385.40	5.7229	242	3.2316	494.03	431.32	6.0369
173	4.5501	430.59	386.05	5.7282	243	3.2181	494.95	431.98	6.0407
174	4.5232	431.52	386.71	5.7335	244	3.2048	495.87	432.63	6.0444
175	4.4965	432.44	387.37	5.7388	245	3.1916	496.79	433.29	6.0482
176	4.4703	433.36	388.03	5.7441	246	3.1785	497.70	433.95	6.0519
177	4.4443	434.29	388.69	5.7493	247	3.1654	498.62	434.60	6.0556
178	4.4186	435.21	389.35	5.7545	248	3.1525	499.54	435.26	6.0593
179	4.3933	436.13	390.00	5.7597	249	3.1398	500.46	435.91	6.0630
180	4.3682	437.05	390.66	5.7648	250	3.1271	501.37	436.57	6.0667
181	4.3434	437.98	391.32	5.7699	251	3.1145	502.29	437.22	6.0704
182	4.3189	438.90	391.98	5.7750	252	3.1020	503.21	437.88	6.0740
183	4.2947	439.82	392.63	5.7801	253	3.0896	504.13	438.54	6.0777
184	4.2708	440.74	393.29	5.7851	254	3.0773	505.04	439.19	6.0813
185	4.2471	441.66	393.95	5.7901	255	3.0651	505.96	439.85	6.0849
186	4.2237	442.58	394.60	5.7951	256	3.0530	506.88	440.50	6.0885
187	4.2006	443.50	395.26	5.8000	257	3.0410	507.80	441.16	6.0921
188	4.1777	444.43	395.92	5.8049	258	3.0291	508.72	441.81	6.0956
189	4.1551	445.35	396.58	5.8098	259	3.0173	509.63	442.47	6.0992
190	4.1327	446.27	397.23	5.8147	260	3.0056	510.55	443.13	6.1027
191	4.1106	447.19	397.89	5.8195	261	2.9940	511.47	443.78	6.1062
192	4.0887	448.11	398.54	5.8243	262	2.9825	512.39	444.44	6.1098
193	4.0670	449.03	399.20	5.8291	263	2.9710	513.31	445.10	6.1132
194	4.0456	449.95	399.86	5.8338	264	2.9597	514.22	445.75	6.1167
195	4.0244	450.87	400.51	5.8386	265	2.9484	515.14	446.41	6.1202
196	4.0034	451.79	401.17	5.8433	266	2.9372	516.06	447.07	6.1237
197	3.9827	452.71	401.83	5.8479	267	2.9261	516.98	447.72	6.1271
198	3.9622	453.63	402.48	5.8526	268	2.9151	517.90	448.38	6.1305
199	3.9418	454.55	403.14	5.8572	269	2.9042	518.81	449.04	6.1340
200	3.9217	455.47	403.80	5.8618	270	2.8933	519.73	449.69	6.1374
201	3.9018	456.39	404.45	5.8664	271	2.8826	520.65	450.35	6.1408
202	3.8821	457.31	405.11	5.8710	272	2.8719	521.57	451.01	6.1441
203	3.8627	458.23	405.76	5.8755	273	2.8613	522.49	451.66	6.1475
204	3.8434	459.15	406.42	5.8801	274	2.8507	523.41	452.32	6.1509
205	3.8243	460.07	407.07	5.8845	275	2.8403	524.33	452.98	6.1542
206	3.8054	460.98	407.73	5.8890	276	2.8299	525.25	453.64	6.1576
207	3.7866	461.90	408.39	5.8935	277	2.8196	526.16	454.29	6.1609
208	3.7681	462.82	409.04	5.8979	278	2.8094	527.08	454.95	6.1642
209	3.7498	463.74	409.70	5.9023	279	2.7992	528.00	455.61	6.1675
210	3.7316	464.66	410.35	5.9067	280	2.7892	528.92	456.27	6.1708
211	3.7136	465.58	411.01	5.9111	281	2.7792	529.84	456.92	6.1741
212	3.6958	466.50	411.66	5.9154	282	2.7692	530.76	457.58	6.1773
213	3.6781	467.41	412.32	5.9197	283	2.7594	531.68	458.24	6.1806
214	3.6607	468.33	412.97	5.9240	284	2.7496	532.60	458.90	6.1838
215	3.6434	469.25	413.63	5.9283	285	2.7399	533.52	459.56	6.1871
216	3.6262	470.17	414.29	5.9326	286	2.7302	534.44	460.22	6.1903
217	3.6092	471.09	414.94	5.9368	287	2.7207	535.36	460.87	6.1935
218	3.5924	472.01	415.60	5.9410	288	2.7111	536.28	461.53	6.1967
219	3.5758	472.92	416.25	5.9452	289	2.7017	537.20	462.19	6.1999
220	3.5593	473.84	416.91	5.9494	290	2.6923	538.12	462.85	6.2031
221	3.5429	474.76	417.56	5.9536	291	2.6830	539.04	463.51	6.2062
222	3.5267	475.68	418.22	5.9577	292	2.6737	539.96	464.17	6.2094
223	3.5107	476.60	418.87	5.9618	293	2.6646	540.88	464.83	6.2125
224	3.4948	477.51	419.53	5.9659	294	2.6554	541.80	465.49	6.2157
225	3.4790	478.43	420.18	5.9700	295	2.6464	542.72	466.15	6.2188
226	3.4634	479.35	420.84	5.9741	296	2.6374	543.64	466.81	6.2219
227	3.4479	480.27	421.49	5.9782	297	2.6284	544.56	467.47	6.2250
228	3.4326	481.19	422.15	5.9822	298	2.6196	545.49	468.13	6.2281
229	3.4174	482.10	422.80	5.9862	299	2.6108	546.41	468.79	6.2312
230	3.4024	483.02	423.46	5.9902	300	2.6020	547.33	469.45	6.2343

3.00 ATMOSPHERE ISOBAR

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
					91	1136.0	142.29	142.02	2.9513
					92	1130.9	144.03	143.76	2.9703
					93	1125.7	145.77	145.50	2.9891
					94	1120.5	147.53	147.26	3.0079
					95	1115.2	149.29	149.02	3.0265
					96	1109.9	151.06	150.78	3.0450
					97	1104.5	152.83	152.56	3.0634
					98	1099.1	154.61	154.34	3.0817
					99	1093.7	156.40	156.12	3.0999
					100	1088.1	158.20	157.92	3.1179
					101	1082.6	160.00	159.72	3.1358
					102	1077.0	161.80	161.52	3.1536
					• 102.175	1076.0	162.12	161.84	3.1567
					• 102.175	12.317	362.27	337.59	5.1156
					103	12.196	363.10	338.17	5.1237
					104	12.053	364.10	338.88	5.1333
					105	11.914	365.09	339.58	5.1429
					106	11.778	366.09	340.28	5.1523
					107	11.646	367.08	340.98	5.1616
					108	11.518	368.07	341.68	5.1708
					109	11.392	369.06	342.38	5.1799
					110	11.270	370.05	343.07	5.1889
					111	11.150	371.03	343.77	5.1979
					112	11.034	372.01	344.46	5.2067
					113	10.920	372.99	345.16	5.2154
					114	10.809	373.97	345.85	5.2240
					115	10.700	374.95	346.54	5.2325
					116	10.593	375.93	347.23	5.2410
					117	10.489	376.90	347.92	5.2494
					118	10.388	377.87	348.61	5.2576
					119	10.288	378.84	349.30	5.2658
					120	10.190	379.81	349.98	5.2739
					121	10.095	380.78	350.67	5.2820
					122	10.001	381.75	351.35	5.2899
					123	9.9096	382.71	352.04	5.2978
					124	9.8198	383.68	352.72	5.3056
55	1303.1	86.172	85.939	2.1735	125	9.7317	384.64	353.41	5.3134
56	1298.4	87.577	87.343	2.1988	126	9.6453	385.60	354.09	5.3210
57	1293.8	88.990	88.755	2.2238	127	9.5606	386.56	354.77	5.3286
58	1289.2	90.410	90.174	2.2485	128	9.4775	387.52	355.45	5.3361
59	1284.5	91.837	91.600	2.2729	129	9.3959	388.48	356.13	5.3436
60	1279.9	93.271	93.034	2.2970	130	9.3159	389.44	356.81	5.3510
61	1275.3	94.713	94.475	2.3209	131	9.2373	390.39	357.49	5.3583
62	1270.6	96.163	95.924	2.3444	132	9.1601	391.35	358.17	5.3656
63	1266.0	97.621	97.381	2.3678	133	9.0843	392.30	358.84	5.3728
64	1261.4	99.086	98.845	2.3908	134	9.0099	393.26	359.52	5.3799
65	1256.8	100.56	100.32	2.4137	135	8.9367	394.21	360.20	5.3870
66	1252.2	102.04	101.80	2.4363	136	8.8649	395.16	360.87	5.3940
67	1247.6	103.53	103.29	2.4587	137	8.7942	396.11	361.55	5.4010
68	1243.0	105.03	104.79	2.4810	138	8.7248	397.06	362.22	5.4079
69	1238.4	106.54	106.30	2.5030	139	8.6565	398.01	362.90	5.4148
70	1233.8	108.06	107.82	2.5249	140	8.5894	398.96	363.57	5.4216
71	1229.2	109.59	109.34	2.5465	141	8.5233	399.91	364.24	5.4283
72	1224.6	111.13	110.88	2.5680	142	8.4583	400.85	364.92	5.4350
73	1220.0	112.68	112.43	2.5894	143	8.3944	401.80	365.59	5.4416
74	1215.5	114.23	113.98	2.6106	144	8.3315	402.74	366.26	5.4482
75	1210.9	115.80	115.55	2.6316	145	8.2696	403.69	366.93	5.4547
76	1206.3	117.38	117.13	2.6525	146	8.2087	404.63	367.60	5.4612
77	1201.8	118.97	118.72	2.6733	147	8.1487	405.58	368.27	5.4677
78	1197.2	120.57	120.32	2.6940	148	8.0896	406.52	368.94	5.4741
79	1192.7	122.18	121.92	2.7145	149	8.0315	407.46	369.61	5.4804
80	1188.1	123.80	123.54	2.7349	150	7.9742	408.40	370.28	5.4867
81	1183.6	125.43	125.18	2.7551	151	7.9177	409.34	370.95	5.4930
82	1179.0	127.07	126.82	2.7753	152	7.8621	410.28	371.62	5.4992
83	1174.5	128.73	128.47	2.7953	153	7.8074	411.22	372.29	5.5053
84	1170.0	130.39	130.13	2.8152	154	7.7534	412.16	372.96	5.5114
85	1165.5	132.06	131.80	2.8350	155	7.7002	413.10	373.62	5.5175
86	1161.0	133.74	133.48	2.8546	156	7.6477	414.04	374.29	5.5235
87	1156.1	135.43	135.17	2.8742	157	7.5961	414.98	374.96	5.5295
88	1151.1	137.13	136.87	2.8936	158	7.5451	415.91	375.63	5.5355
89	1146.1	138.84	138.58	2.9130	159	7.4948	416.85	376.29	5.5414
90	1141.1	140.56	140.30	2.9322	160	7.4453	417.79	376.96	5.5473

• PHASE CHANGE

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
161	7.3964	418.72	377.62	5.5531	231	5.0902	483.54	423.83	5.8876
162	7.3482	419.66	378.29	5.5589	232	5.0679	484.46	424.48	5.8915
163	7.3007	420.59	378.95	5.5646	233	5.0457	485.38	425.14	5.8955
164	7.2537	421.53	379.62	5.5704	234	5.0237	486.30	425.80	5.8994
165	7.2075	422.46	380.28	5.5760	235	5.0019	487.23	426.45	5.9034
166	7.1618	423.39	380.95	5.5817	236	4.9803	488.15	427.11	5.9073
167	7.1167	424.33	381.61	5.5873	237	4.9589	489.07	427.77	5.9112
168	7.0722	425.26	382.28	5.5928	238	4.9377	489.99	428.43	5.9150
169	7.0283	426.19	382.94	5.5984	239	4.9167	490.91	429.08	5.9189
170	6.9850	427.12	383.61	5.6039	240	4.8958	491.83	429.74	5.9227
171	6.9422	428.06	384.27	5.6093	241	4.8752	492.75	430.40	5.9266
172	6.8999	428.99	384.93	5.6148	242	4.8547	493.67	431.05	5.9304
173	6.8582	429.92	385.59	5.6202	243	4.8343	494.59	431.71	5.9342
174	6.8170	430.85	386.26	5.6255	244	4.8142	495.51	432.37	5.9380
175	6.7763	431.78	386.92	5.6309	245	4.7942	496.43	433.02	5.9417
176	6.7361	432.71	387.58	5.6362	246	4.7744	497.35	433.68	5.9455
177	6.6964	433.64	388.24	5.6414	247	4.7547	498.27	434.34	5.9492
178	6.6572	434.57	388.91	5.6467	248	4.7353	499.19	435.00	5.9529
179	6.6185	435.50	389.57	5.6519	249	4.7159	500.11	435.65	5.9566
180	6.5802	436.43	390.23	5.6570	250	4.6968	501.03	436.31	5.9603
181	6.5424	437.35	390.89	5.6622	251	4.6778	501.95	436.97	5.9640
182	6.5050	438.28	391.55	5.6673	252	4.6589	502.87	437.63	5.9676
183	6.4680	439.21	392.21	5.6724	253	4.6402	503.79	438.28	5.9713
184	6.4315	440.14	392.87	5.6774	254	4.6217	504.71	438.94	5.9749
185	6.3954	441.07	393.54	5.6825	255	4.6033	505.63	439.60	5.9785
186	6.3598	441.99	394.20	5.6875	256	4.5850	506.55	440.25	5.9821
187	6.3245	442.92	394.86	5.6924	257	4.5669	507.47	440.91	5.9857
188	6.2897	443.85	395.52	5.6974	258	4.5490	508.39	441.57	5.9893
189	6.2552	444.77	396.18	5.7023	259	4.5311	509.31	442.23	5.9929
190	6.2211	445.70	396.84	5.7072	260	4.5135	510.23	442.88	5.9964
191	6.1874	446.63	397.50	5.7121	261	4.4959	511.15	443.54	5.9999
192	6.1541	447.55	398.16	5.7169	262	4.4785	512.07	444.20	6.0035
193	6.1211	448.48	398.82	5.7217	263	4.4613	512.99	444.86	6.0070
194	6.0885	449.40	399.48	5.7265	264	4.4441	513.91	445.52	6.0105
195	6.0563	450.33	400.14	5.7312	265	4.4271	514.83	446.17	6.0139
196	6.0244	451.25	400.80	5.7360	266	4.4103	515.76	446.83	6.0174
197	5.9928	452.18	401.45	5.7407	267	4.3935	516.68	447.49	6.0209
198	5.9616	453.10	402.11	5.7454	268	4.3769	517.60	448.15	6.0243
199	5.9308	454.03	402.77	5.7500	269	4.3605	518.52	448.81	6.0277
200	5.9002	454.95	403.43	5.7546	270	4.3441	519.44	449.46	6.0311
201	5.8700	455.88	404.09	5.7593	271	4.3279	520.36	450.12	6.0345
202	5.8401	456.80	404.75	5.7638	272	4.3118	521.28	450.78	6.0379
203	5.8105	457.72	405.41	5.7684	273	4.2958	522.20	451.44	6.0413
204	5.7812	458.65	406.07	5.7729	274	4.2799	523.12	452.10	6.0447
205	5.7522	459.57	406.73	5.7775	275	4.2641	524.04	452.75	6.0480
206	5.7235	460.49	407.38	5.7820	276	4.2485	524.96	453.41	6.0514
207	5.6951	461.42	408.04	5.7864	277	4.2330	525.88	454.07	6.0547
208	5.6669	462.34	408.70	5.7909	278	4.2176	526.80	454.73	6.0580
209	5.6391	463.26	409.36	5.7953	279	4.2023	527.73	455.39	6.0613
210	5.6115	464.19	410.02	5.7997	280	4.1871	528.65	456.05	6.0646
211	5.5842	465.11	410.67	5.8041	281	4.1721	529.57	456.71	6.0679
212	5.5572	466.03	411.33	5.8085	282	4.1571	530.49	457.37	6.0712
213	5.5305	466.95	411.99	5.8128	283	4.1422	531.41	458.03	6.0744
214	5.5040	467.88	412.65	5.8171	284	4.1275	532.33	458.69	6.0777
215	5.4778	468.80	413.31	5.8214	285	4.1129	533.25	459.34	6.0809
216	5.4518	469.72	413.96	5.8257	286	4.0983	534.17	460.00	6.0842
217	5.4261	470.64	414.62	5.8299	287	4.0839	535.10	460.66	6.0874
218	5.4006	471.57	415.28	5.8342	288	4.0696	536.02	461.32	6.0906
219	5.3753	472.49	415.94	5.8384	289	4.0553	536.94	461.98	6.0938
220	5.3503	473.41	416.59	5.8426	290	4.0412	537.86	462.64	6.0970
221	5.3256	474.33	417.25	5.8468	291	4.0272	538.78	463.30	6.1001
222	5.3011	475.25	417.91	5.8509	292	4.0132	539.71	463.96	6.1033
223	5.2768	476.17	418.57	5.8551	293	3.9994	540.63	464.62	6.1065
224	5.2527	477.09	419.22	5.8592	294	3.9857	541.55	465.28	6.1096
225	5.2288	478.02	419.88	5.8633	295	3.9720	542.47	465.94	6.1127
226	5.2052	478.94	420.54	5.8674	296	3.9585	543.40	466.61	6.1159
227	5.1818	479.86	421.20	5.8715	297	3.9450	544.32	467.27	6.1190
228	5.1586	480.78	421.85	5.8755	298	3.9317	545.24	467.93	6.1221
229	5.1356	481.70	422.51	5.8795	299	3.9184	546.16	468.59	6.1252
230	5.1128	482.62	423.17	5.8836	300	3.9052	547.09	469.25	6.1282

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
					91	1136.3	142.34	141.99	2.9509
					92	1131.1	144.08	143.72	2.9699
					93	1126.0	145.83	145.47	2.9887
					94	1120.7	147.58	147.22	3.0075
					95	1115.5	149.34	148.97	3.0261
					96	1110.2	151.11	150.74	3.0446
					97	1104.8	152.88	152.51	3.0630
					98	1099.4	154.66	154.29	3.0813
					99	1093.9	156.45	156.08	3.0994
					100	1088.4	158.24	157.87	3.1174
					101	1082.9	160.04	159.67	3.1353
					102	1077.3	161.85	161.47	3.1531
					103	1071.6	163.66	163.28	3.1708
					104	1065.9	165.47	165.09	3.1883
					105	1060.2	167.29	166.91	3.2058
					• 105.896	1054.9	168.93	168.55	3.2213
					• 105.896	16.121	364.18	339.04	5.0651
					106	16.101	364.29	339.12	5.0661
					107	15.907	365.32	339.84	5.0758
					108	15.719	366.35	340.56	5.0853
					109	15.536	367.37	341.28	5.0948
					110	15.358	368.39	342.00	5.1041
					111	15.185	369.41	342.71	5.1133
					112	15.016	370.42	343.43	5.1224
					113	14.852	371.43	344.14	5.1313
					114	14.692	372.44	344.85	5.1402
					115	14.536	373.44	345.56	5.1490
					116	14.383	374.45	346.27	5.1577
					117	14.235	375.45	346.97	5.1663
					118	14.089	376.44	347.68	5.1748
					119	13.947	377.44	348.38	5.1832
					120	13.809	378.43	349.08	5.1915
					121	13.673	379.42	349.78	5.1997
					122	13.541	380.41	350.48	5.2078
					123	13.411	381.40	351.18	5.2159
					124	13.284	382.39	351.88	5.2239
55	1303.2	86.235	85.924	2.1732	125	13.160	383.37	352.57	5.2318
56	1298.6	87.640	87.328	2.1986	126	13.038	384.35	353.27	5.2396
57	1293.9	89.052	88.739	2.2236	127	12.919	385.33	353.96	5.2474
58	1289.3	90.472	90.157	2.2482	128	12.802	386.31	354.65	5.2550
59	1284.6	91.899	91.583	2.2726	129	12.688	387.29	355.34	5.2626
60	1280.0	93.333	93.017	2.2967	130	12.576	388.26	356.04	5.2702
61	1275.4	94.775	94.457	2.3206	131	12.466	389.24	356.73	5.2776
62	1270.8	96.225	95.906	2.3441	132	12.358	390.21	357.41	5.2850
63	1266.1	97.682	97.362	2.3675	133	12.252	391.18	358.10	5.2924
64	1261.5	99.148	98.827	2.3905	134	12.149	392.15	358.79	5.2996
65	1256.9	100.62	100.30	2.4134	135	12.047	393.12	359.48	5.3068
66	1252.3	102.10	101.78	2.4360	136	11.947	394.09	360.16	5.3140
67	1247.7	103.59	103.27	2.4584	137	11.849	395.05	360.85	5.3210
68	1243.1	105.09	104.77	2.4807	138	11.752	396.02	361.53	5.3281
69	1238.5	106.60	106.28	2.5027	139	11.657	396.98	362.21	5.3350
70	1233.9	108.12	107.79	2.5245	140	11.564	397.94	362.90	5.3419
71	1229.4	109.65	109.32	2.5462	141	11.473	398.90	363.58	5.3488
72	1224.8	111.19	110.86	2.5677	142	11.383	399.87	364.26	5.3555
73	1220.2	112.74	112.40	2.5891	143	11.295	400.82	364.94	5.3623
74	1215.6	114.29	113.96	2.6103	144	11.208	401.78	365.62	5.3689
75	1211.1	115.86	115.53	2.6313	145	11.122	402.74	366.30	5.3756
76	1206.5	117.44	117.10	2.6522	146	11.038	403.70	366.98	5.3821
77	1202.0	119.03	118.69	2.6730	147	10.955	404.65	367.66	5.3887
78	1197.4	120.63	120.29	2.6936	148	10.874	405.61	368.33	5.3951
79	1192.8	122.24	121.90	2.7142	149	10.794	406.56	369.01	5.4016
80	1188.3	123.86	123.52	2.7345	150	10.715	407.51	369.69	5.4079
81	1183.8	125.49	125.15	2.7548	151	10.638	408.46	370.36	5.4143
82	1179.2	127.13	126.79	2.7749	152	10.561	409.42	371.04	5.4205
83	1174.7	128.78	128.44	2.7950	153	10.486	410.37	371.71	5.4268
84	1170.2	130.45	130.10	2.8149	154	10.412	411.32	372.39	5.4330
85	1165.6	132.12	131.77	2.8347	155	10.339	412.26	373.06	5.4391
86	1161.2	133.79	133.45	2.8543	156	10.267	413.21	373.74	5.4452
87	1156.3	135.49	135.14	2.8738	157	10.196	414.16	374.41	5.4513
88	1151.3	137.19	136.83	2.8933	158	10.126	415.11	375.08	5.4573
89	1146.4	138.90	138.54	2.9126	159	10.058	416.05	375.76	5.4632
90	1141.3	140.62	140.26	2.9318	160	9.9898	417.00	376.43	5.4692

• PHASE CHANGE

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
161	9.9230	417.94	377.10	5.4750	231	6.7992	483.14	423.53	5.8115
162	9.8571	418.89	377.77	5.4809	232	6.7691	484.07	424.19	5.8155
163	9.7922	419.83	378.44	5.4867	233	6.7393	484.99	424.85	5.8195
164	9.7281	420.77	379.11	5.4925	234	6.7097	485.92	425.51	5.8234
165	9.6649	421.72	379.78	5.4982	235	6.6805	486.84	426.17	5.8274
166	9.6026	422.66	380.45	5.5039	236	6.6514	487.76	426.83	5.8313
167	9.5411	423.60	381.12	5.5095	237	6.6227	488.69	427.49	5.8352
168	9.4805	424.54	381.79	5.5152	238	6.5942	489.61	428.15	5.8391
169	9.4206	425.48	382.46	5.5207	239	6.5659	490.53	428.81	5.8430
170	9.3616	426.42	383.13	5.5263	240	6.5379	491.46	429.47	5.8468
171	9.3033	427.36	383.80	5.5318	241	6.5101	492.38	430.12	5.8507
172	9.2458	428.30	384.46	5.5373	242	6.4826	493.30	430.78	5.8545
173	9.1890	429.24	385.13	5.5427	243	6.4553	494.23	431.44	5.8583
174	9.1330	430.18	385.80	5.5481	244	6.4282	495.15	432.10	5.8621
175	9.0777	431.11	386.47	5.5535	245	6.4014	496.07	432.76	5.8659
176	9.0230	432.05	387.13	5.5588	246	6.3748	497.00	433.42	5.8696
177	8.9691	432.99	387.80	5.5641	247	6.3484	497.92	434.08	5.8734
178	8.9158	433.92	388.46	5.5694	248	6.3223	498.84	434.74	5.8771
179	8.8632	434.86	389.13	5.5746	249	6.2963	499.77	435.39	5.8808
180	8.8113	435.79	389.80	5.5799	250	6.2706	500.69	436.05	5.8845
181	8.7599	436.73	390.46	5.5850	251	6.2451	501.61	436.71	5.8882
182	8.7092	437.66	391.13	5.5902	252	6.2198	502.53	437.37	5.8919
183	8.6591	438.60	391.79	5.5953	253	6.1947	503.46	438.03	5.8955
184	8.6096	439.53	392.46	5.6004	254	6.1698	504.38	438.69	5.8992
185	8.5607	440.47	393.12	5.6055	255	6.1451	505.30	439.35	5.9028
186	8.5124	441.40	393.79	5.6105	256	6.1207	506.22	440.01	5.9064
187	8.4646	442.33	394.45	5.6155	257	6.0964	507.15	440.67	5.9100
188	8.4174	443.26	395.11	5.6205	258	6.0723	508.07	441.32	5.9136
189	8.3707	444.20	395.78	5.6254	259	6.0484	508.99	441.98	5.9171
190	8.3245	445.13	396.44	5.6303	260	6.0247	509.92	442.64	5.9207
191	8.2789	446.06	397.10	5.6352	261	6.0012	510.84	443.30	5.9242
192	8.2338	446.99	397.77	5.6401	262	5.9778	511.76	443.96	5.9278
193	8.1892	447.92	398.43	5.6449	263	5.9547	512.68	444.62	5.9313
194	8.1452	448.85	399.09	5.6497	264	5.9317	513.61	445.28	5.9348
195	8.1016	449.78	399.76	5.6545	265	5.9089	514.53	445.94	5.9383
196	8.0584	450.71	400.42	5.6593	266	5.8863	515.45	446.60	5.9417
197	8.0158	451.64	401.08	5.6640	267	5.8639	516.37	447.26	5.9452
198	7.9736	452.57	401.74	5.6687	268	5.8416	517.30	447.91	5.9487
199	7.9319	453.50	402.41	5.6734	269	5.8196	518.22	448.57	5.9521
200	7.8906	454.43	403.07	5.6780	270	5.7976	519.14	449.23	5.9555
201	7.8498	455.36	403.73	5.6827	271	5.7759	520.06	449.89	5.9589
202	7.8094	456.29	404.39	5.6873	272	5.7543	520.99	450.55	5.9623
203	7.7694	457.22	405.05	5.6919	273	5.7329	521.91	451.21	5.9657
204	7.7299	458.15	405.71	5.6964	274	5.7116	522.83	451.87	5.9691
205	7.6907	459.07	406.38	5.7010	275	5.6905	523.76	452.53	5.9725
206	7.6520	460.00	407.04	5.7055	276	5.6696	524.68	453.19	5.9758
207	7.6137	460.93	407.70	5.7100	277	5.6488	525.60	453.85	5.9791
208	7.5757	461.86	408.36	5.7145	278	5.6281	526.52	454.51	5.9825
209	7.5382	462.79	409.02	5.7189	279	5.6076	527.45	455.17	5.9858
210	7.5010	463.71	409.68	5.7233	280	5.5873	528.37	455.83	5.9891
211	7.4642	464.64	410.34	5.7277	281	5.5671	529.29	456.49	5.9924
212	7.4278	465.57	411.00	5.7321	282	5.5471	530.22	457.15	5.9957
213	7.3918	466.49	411.66	5.7365	283	5.5272	531.14	457.81	5.9989
214	7.3561	467.42	412.32	5.7408	284	5.5074	532.06	458.47	6.0022
215	7.3207	468.34	412.98	5.7451	285	5.4878	532.99	459.13	6.0054
216	7.2857	469.27	413.64	5.7494	286	5.4684	533.91	459.79	6.0087
217	7.2511	470.20	414.30	5.7537	287	5.4491	534.83	460.45	6.0119
218	7.2168	471.12	414.96	5.7580	288	5.4299	535.76	461.11	6.0151
219	7.1828	472.05	415.62	5.7622	289	5.4108	536.68	461.78	6.0183
220	7.1491	472.97	416.28	5.7664	290	5.3919	537.60	462.44	6.0215
221	7.1158	473.90	416.94	5.7706	291	5.3731	538.53	463.10	6.0247
222	7.0828	474.82	417.60	5.7748	292	5.3545	539.45	463.76	6.0278
223	7.0501	475.75	418.26	5.7789	293	5.3360	540.38	464.42	6.0310
224	7.0177	476.67	418.92	5.7831	294	5.3176	541.30	465.08	6.0341
225	6.9856	477.60	419.58	5.7872	295	5.2993	542.22	465.74	6.0373
226	6.9538	478.52	420.24	5.7913	296	5.2812	543.15	466.40	6.0404
227	6.9223	479.45	420.90	5.7954	297	5.2632	544.07	467.07	6.0435
228	6.8911	480.37	421.56	5.7994	298	5.2453	545.00	467.73	6.0466
229	6.8602	481.30	422.22	5.8035	299	5.2275	545.92	468.39	6.0497
230	6.8295	482.22	422.88	5.8075	300	5.2099	546.85	469.05	6.0528

5.00 ATMOSPHERE ISOBAR

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
					91	1136.5	142.40	141.95	2.9505
					92	1131.4	144.13	143.68	2.9695
					93	1126.2	145.88	145.43	2.9883
					94	1121.0	147.63	147.18	3.0070
					95	1115.7	149.39	148.93	3.0257
					96	1110.4	151.15	150.70	3.0442
					97	1105.1	152.93	152.47	3.0625
					98	1099.7	154.71	154.25	3.0808
					99	1094.2	156.50	156.03	3.0989
					100	1088.7	158.29	157.82	3.1170
					101	1083.2	160.09	159.62	3.1349
					102	1077.6	161.89	161.42	3.1526
					103	1072.0	163.70	163.23	3.1703
					104	1066.3	165.52	165.04	3.1878
					105	1060.5	167.34	166.86	3.2052
					106	1054.7	169.16	168.68	3.2225
					107	1048.8	170.99	170.51	3.2397
					108	1042.9	172.82	172.34	3.2568
					• 108.983	1037.0	174.63	174.14	3.2734
					• 108.983	19.900	365.57	340.11	5.0255
					109	19.896	365.59	340.13	5.0256
					110	19.651	366.65	340.87	5.0353
					111	19.414	367.70	341.61	5.0448
					112	19.184	368.75	342.34	5.0542
					113	18.961	369.80	343.08	5.0635
					114	18.744	370.84	343.81	5.0727
					115	18.532	371.87	344.54	5.0817
					116	18.327	372.91	345.26	5.0907
					117	18.127	373.94	345.99	5.0995
					118	17.932	374.96	346.71	5.1083
					119	17.741	375.98	347.43	5.1169
					120	17.556	377.00	348.15	5.1254
					121	17.375	378.02	348.86	5.1339
					122	17.199	379.04	349.58	5.1422
					123	17.026	380.05	350.29	5.1505
					124	16.858	381.06	351.00	5.1586
55	1303.3	86.297	85.909	2.1730	125	16.693	382.06	351.71	5.1667
56	1298.7	87.702	87.312	2.1983	126	16.532	383.07	352.42	5.1747
57	1294.0	89.114	88.723	2.2233	127	16.375	384.07	353.13	5.1826
58	1289.4	90.534	90.141	2.2480	128	16.221	385.07	353.83	5.1905
59	1284.8	91.961	91.567	2.2723	129	16.070	386.06	354.54	5.1982
60	1280.1	93.395	92.999	2.2965	130	15.923	387.06	355.24	5.2059
61	1275.5	94.837	94.440	2.3203	131	15.778	388.05	355.94	5.2135
62	1270.9	96.287	95.888	2.3439	132	15.637	389.04	356.64	5.2211
63	1266.3	97.744	97.344	2.3672	133	15.498	390.03	357.34	5.2285
64	1261.7	99.209	98.808	2.3903	134	15.362	391.02	358.04	5.2359
65	1257.1	100.68	100.28	2.4131	135	15.229	392.01	358.74	5.2433
66	1252.5	102.17	101.76	2.4357	136	15.099	392.99	359.44	5.2505
67	1247.9	103.66	103.25	2.4581	137	14.970	393.97	360.13	5.2577
68	1243.3	105.16	104.75	2.4804	138	14.845	394.95	360.82	5.2649
69	1238.7	106.66	106.26	2.5024	139	14.721	395.93	361.52	5.2719
70	1234.1	108.18	107.77	2.5242	140	14.600	396.91	362.21	5.2789
71	1229.5	109.71	109.30	2.5459	141	14.481	397.89	362.90	5.2859
72	1224.9	111.25	110.83	2.5674	142	14.365	398.86	363.59	5.2928
73	1220.4	112.80	112.38	2.5888	143	14.250	399.83	364.28	5.2996
74	1215.8	114.35	113.94	2.6100	144	14.137	400.81	364.97	5.3064
75	1211.2	115.92	115.50	2.6310	145	14.027	401.78	365.66	5.3131
76	1206.7	117.50	117.08	2.6519	146	13.918	402.75	366.34	5.3197
77	1202.1	119.09	118.67	2.6727	147	13.811	403.71	367.03	5.3264
78	1197.6	120.69	120.27	2.6933	148	13.706	404.68	367.72	5.3329
79	1193.0	122.30	121.87	2.7138	149	13.602	405.65	368.40	5.3394
80	1188.5	123.92	123.49	2.7342	150	13.501	406.61	369.08	5.3459
81	1183.9	125.55	125.12	2.7545	151	13.400	407.57	369.77	5.3523
82	1179.4	127.19	126.76	2.7746	152	13.302	408.54	370.45	5.3586
83	1174.9	128.84	128.41	2.7946	153	13.205	409.50	371.13	5.3649
84	1170.4	130.51	130.07	2.8145	154	13.110	410.46	371.81	5.3712
85	1165.8	132.18	131.74	2.8343	155	13.016	411.42	372.50	5.3774
86	1161.4	133.85	133.41	2.8539	156	12.923	412.38	373.18	5.3836
87	1156.5	135.54	135.10	2.8734	157	12.832	413.34	373.86	5.3897
88	1151.6	137.24	136.80	2.8929	158	12.743	414.29	374.53	5.3958
89	1146.6	138.95	138.51	2.9122	159	12.654	415.25	375.21	5.4018
90	1141.6	140.67	140.23	2.9314	160	12.567	416.20	375.89	5.4078

• PHASE CHANGE

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
161	12.482	417.16	376.57	5.4137	231	8.5142	482.75	423.24	5.7523
162	12.397	418.11	377.25	5.4196	232	8.4763	483.67	423.90	5.7563
163	12.314	419.06	377.92	5.4255	233	8.4387	484.60	424.57	5.7603
164	12.232	420.02	378.60	5.4313	234	8.4015	485.53	425.23	5.7642
165	12.151	420.97	379.27	5.4371	235	8.3646	486.45	425.89	5.7682
166	12.071	421.92	379.95	5.4428	236	8.3281	487.38	426.55	5.7721
167	11.993	422.87	380.62	5.4485	237	8.2918	488.31	427.21	5.7760
168	11.915	423.82	381.30	5.4542	238	8.2559	489.23	427.87	5.7799
169	11.839	424.77	381.97	5.4598	239	8.2203	490.16	428.53	5.7838
170	11.763	425.71	382.65	5.4654	240	8.1850	491.09	429.19	5.7877
171	11.689	426.66	383.32	5.4710	241	8.1501	492.01	429.85	5.7915
172	11.616	427.61	383.99	5.4765	242	8.1154	492.94	430.51	5.7954
173	11.543	428.55	384.66	5.4820	243	8.0810	493.87	431.17	5.7992
174	11.472	429.50	385.34	5.4874	244	8.0470	494.79	431.83	5.8030
175	11.401	430.44	386.01	5.4929	245	8.0132	495.72	432.49	5.8068
176	11.332	431.39	386.68	5.4982	246	7.9797	496.64	433.15	5.8106
177	11.263	432.33	387.35	5.5036	247	7.9465	497.57	433.81	5.8143
178	11.195	433.27	388.02	5.5089	248	7.9136	498.49	434.47	5.8181
179	11.128	434.22	388.69	5.5142	249	7.8809	499.42	435.14	5.8218
180	11.062	435.16	389.36	5.5194	250	7.8486	500.35	435.80	5.8255
181	10.996	436.10	390.03	5.5246	251	7.8165	501.27	436.46	5.8292
182	10.932	437.04	390.70	5.5298	252	7.7847	502.20	437.12	5.8329
183	10.868	437.98	391.37	5.5350	253	7.7531	503.12	437.78	5.8365
184	10.805	438.92	392.04	5.5401	254	7.7218	504.05	438.44	5.8402
185	10.743	439.86	392.70	5.5452	255	7.6908	504.97	439.10	5.8438
186	10.682	440.80	393.37	5.5503	256	7.6600	505.90	439.76	5.8474
187	10.621	441.74	394.04	5.5553	257	7.6294	506.82	440.42	5.8510
188	10.561	442.68	394.71	5.5603	258	7.5991	507.75	441.08	5.8546
189	10.502	443.62	395.38	5.5653	259	7.5691	508.67	441.74	5.8582
190	10.443	444.55	396.04	5.5702	260	7.5393	509.60	442.40	5.8618
191	10.385	445.49	396.71	5.5751	261	7.5097	510.52	443.06	5.8653
192	10.328	446.43	397.38	5.5800	262	7.4804	511.45	443.72	5.8689
193	10.272	447.37	398.04	5.5849	263	7.4513	512.37	444.38	5.8724
194	10.216	448.30	398.71	5.5897	264	7.4224	513.30	445.04	5.8759
195	10.160	449.24	399.37	5.5946	265	7.3938	514.22	445.70	5.8794
196	10.106	450.17	400.04	5.5993	266	7.3654	515.15	446.36	5.8829
197	10.052	451.11	400.71	5.6041	267	7.3372	516.07	447.02	5.8863
198	9.9982	452.04	401.37	5.6088	268	7.3092	517.00	447.68	5.8898
199	9.9454	452.98	402.04	5.6135	269	7.2815	517.92	448.34	5.8932
200	9.8931	453.91	402.70	5.6182	270	7.2539	518.85	449.00	5.8967
201	9.8414	454.84	403.37	5.6229	271	7.2266	519.77	449.66	5.9001
202	9.7903	455.78	404.03	5.6275	272	7.1995	520.70	450.33	5.9035
203	9.7397	456.71	404.69	5.6321	273	7.1725	521.62	450.99	5.9069
204	9.6896	457.64	405.36	5.6367	274	7.1458	522.54	451.65	5.9103
205	9.6401	458.58	406.02	5.6413	275	7.1193	523.47	452.31	5.9136
206	9.5911	459.51	406.69	5.6458	276	7.0930	524.39	452.97	5.9170
207	9.5426	460.44	407.35	5.6503	277	7.0669	525.32	453.63	5.9203
208	9.4946	461.37	408.01	5.6548	278	7.0410	526.24	454.29	5.9237
209	9.4472	462.30	408.68	5.6593	279	7.0153	527.17	454.95	5.9270
210	9.4002	463.24	409.34	5.6637	280	6.9897	528.09	455.61	5.9303
211	9.3537	464.17	410.00	5.6681	281	6.9644	529.02	456.27	5.9336
212	9.3077	465.10	410.67	5.6725	282	6.9392	529.94	456.94	5.9369
213	9.2621	466.03	411.33	5.6769	283	6.9143	530.87	457.60	5.9402
214	9.2170	466.96	411.99	5.6813	284	6.8895	531.79	458.26	5.9434
215	9.1723	467.89	412.66	5.6856	285	6.8648	532.72	458.92	5.9467
216	9.1281	468.82	413.32	5.6899	286	6.8404	533.65	459.58	5.9499
217	9.0844	469.75	413.98	5.6942	287	6.8162	534.57	460.24	5.9532
218	9.0410	470.68	414.64	5.6985	288	6.7921	535.50	460.91	5.9564
219	8.9981	471.61	415.30	5.7028	289	6.7682	536.42	461.57	5.9596
220	8.9557	472.54	415.97	5.7070	290	6.7444	537.35	462.23	5.9628
221	8.9136	473.47	416.63	5.7112	291	6.7209	538.27	462.89	5.9660
222	8.8719	474.40	417.29	5.7154	292	6.6974	539.20	463.55	5.9691
223	8.8306	475.32	417.95	5.7196	293	6.6742	540.12	464.22	5.9723
224	8.7898	476.25	418.61	5.7237	294	6.6511	541.05	464.88	5.9755
225	8.7493	477.18	419.28	5.7279	295	6.6282	541.98	465.54	5.9786
226	8.7092	478.11	419.94	5.7320	296	6.6055	542.90	466.20	5.9817
227	8.6695	479.04	420.60	5.7361	297	6.5829	543.83	466.87	5.9849
228	8.6301	479.96	421.26	5.7401	298	6.5604	544.75	467.53	5.9880
229	8.5911	480.89	421.92	5.7442	299	6.5381	545.68	468.19	5.9911
230	8.5525	481.82	422.58	5.7482	300	6.5160	546.61	468.86	5.9942

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
55	1303.4	86.360	85.893	2.1727
56	1298.8	87.765	87.297	2.1980
57	1294.1	89.177	88.707	2.2230
58	1289.5	90.596	90.125	2.2477
59	1284.9	92.023	91.550	2.2721
60	1280.2	93.457	92.982	2.2962
61	1275.6	94.899	94.422	2.3200
62	1271.0	96.348	95.870	2.3436
63	1266.4	97.806	97.326	2.3669
64	1261.8	99.271	98.789	2.3900
65	1257.2	100.74	100.26	2.4128
66	1252.6	102.23	101.74	2.4354
67	1248.0	103.72	103.23	2.4579
68	1243.4	105.22	104.73	2.4801
69	1238.8	106.73	106.23	2.5021
70	1234.2	108.24	107.75	2.5239
71	1229.7	109.77	109.28	2.5456
72	1225.1	111.31	110.81	2.5671
73	1220.5	112.86	112.36	2.5885
74	1216.0	114.41	113.91	2.6096
75	1211.4	115.98	115.48	2.6307
76	1206.8	117.56	117.06	2.6516
77	1202.3	119.15	118.64	2.6724
78	1197.7	120.75	120.24	2.6930
79	1193.2	122.36	121.85	2.7135
80	1188.7	123.98	123.47	2.7339
81	1184.1	125.61	125.10	2.7541
82	1179.6	127.25	126.74	2.7743
83	1175.1	128.90	128.38	2.7943
84	1170.5	130.56	130.04	2.8142
85	1166.0	132.24	131.71	2.8340
86	1161.6	133.91	133.38	2.8535
87	1156.7	135.60	135.07	2.8731
88	1151.8	137.30	136.77	2.8925
89	1146.8	139.00	138.47	2.9118
90	1141.8	140.72	140.19	2.9310
91	1136.7	142.45	141.91	2.9501
92	1131.6	144.18	143.65	2.9690
93	1126.4	145.93	145.39	2.9879
94	1121.2	147.68	147.14	3.0066
95	1116.0	149.44	148.89	3.0252
96	1110.7	151.20	150.66	3.0437
97	1105.3	152.98	152.43	3.0621
98	1100.0	154.76	154.20	3.0804
99	1094.5	156.54	155.99	3.0985
100	1089.0	158.33	157.78	3.1165
101	1083.5	160.13	159.57	3.1344
102	1077.9	161.94	161.37	3.1521
103	1072.3	163.74	163.18	3.1698
104	1066.6	165.56	164.99	3.1873
105	1060.8	167.38	166.80	3.2047
106	1055.0	169.20	168.62	3.2220
107	1049.2	171.03	170.45	3.2392
108	1043.3	172.86	172.28	3.2562
109	1037.3	174.70	174.11	3.2731
110	1031.2	176.54	175.95	3.2900
111	1025.1	178.39	177.79	3.3067
• 111.646	1021.1	179.58	178.99	3.3174
• 111.646	23.671	366.61	340.93	4.9926
112	23.565	367.00	341.20	4.9961
113	23.271	368.08	341.96	5.0057
114	22.987	369.16	342.71	5.0152
115	22.711	370.23	343.46	5.0246
116	22.443	371.30	344.21	5.0338
117	22.183	372.36	344.96	5.0429
118	21.931	373.42	345.70	5.0520
119	21.685	374.48	346.44	5.0608
120	21.446	375.53	347.18	5.0696
121	21.213	376.57	347.91	5.0783
122	20.987	377.61	348.64	5.0869
123	20.766	378.65	349.37	5.0954
124	20.551	379.68	350.10	5.1037
125	20.341	380.72	350.83	5.1120
126	20.136	381.74	351.55	5.1202
127	19.936	382.77	352.27	5.1283
128	19.740	383.79	352.99	5.1363
129	19.549	384.81	353.71	5.1442
130	19.363	385.83	354.43	5.1521
131	19.180	386.84	355.14	5.1599
132	19.002	387.85	355.86	5.1675
133	18.827	388.86	356.57	5.1752
134	18.656	389.86	357.28	5.1827
135	18.489	390.87	357.99	5.1902
136	18.325	391.87	358.69	5.1976
137	18.164	392.87	359.40	5.2049
138	18.006	393.87	360.10	5.2121
139	17.852	394.86	360.81	5.2193
140	17.701	395.86	361.51	5.2264
141	17.552	396.85	362.21	5.2335
142	17.407	397.84	362.91	5.2405
143	17.264	398.83	363.61	5.2474
144	17.123	399.81	364.31	5.2543
145	16.985	400.80	365.00	5.2611
146	16.850	401.78	365.70	5.2679
147	16.717	402.76	366.39	5.2746
148	16.587	403.74	367.09	5.2812
149	16.458	404.72	367.78	5.2878
150	16.332	405.70	368.47	5.2943
151	16.208	406.67	369.16	5.3008
152	16.086	407.65	369.85	5.3073
153	15.966	408.62	370.54	5.3136
154	15.848	409.59	371.23	5.3200
155	15.732	410.56	371.92	5.3262
156	15.618	411.53	372.61	5.3325
157	15.506	412.50	373.29	5.3387
158	15.395	413.47	373.98	5.3448
159	15.286	414.43	374.66	5.3509
160	15.179	415.40	375.35	5.3570

• PHASE CHANGE

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
161	15.074	416.36	376.03	5.3630	231	10.235	482.35	422.95	5.7036
162	14.970	417.33	376.72	5.3689	232	10.190	483.28	423.61	5.7076
163	14.867	418.29	377.40	5.3749	233	10.144	484.21	424.28	5.7116
164	14.767	419.25	378.08	5.3807	234	10.099	485.14	424.94	5.7156
165	14.667	420.21	378.76	5.3866	235	10.054	486.07	425.60	5.7196
166	14.569	421.17	379.44	5.3924	236	10.010	487.00	426.27	5.7235
167	14.473	422.13	380.12	5.3981	237	9.9664	487.93	426.93	5.7275
168	14.377	423.09	380.80	5.4038	238	9.9230	488.86	427.59	5.7314
169	14.284	424.04	381.48	5.4095	239	9.8799	489.79	428.25	5.7353
170	14.191	425.00	382.16	5.4152	240	9.8373	490.72	428.92	5.7392
171	14.100	425.95	382.84	5.4208	241	9.7950	491.65	429.58	5.7430
172	14.010	426.91	383.51	5.4263	242	9.7531	492.57	430.24	5.7469
173	13.921	427.86	384.19	5.4319	243	9.7116	493.50	430.90	5.7507
174	13.834	428.82	304.87	5.4374	244	9.6704	494.43	431.56	5.7545
175	13.747	429.77	385.54	5.4428	245	9.6296	495.36	432.23	5.7583
176	13.662	430.72	386.22	5.4482	246	9.5891	496.29	432.89	5.7621
177	13.578	431.67	386.90	5.4536	247	9.5490	497.22	433.55	5.7659
178	13.495	432.62	387.57	5.4590	248	9.5092	498.15	434.21	5.7696
179	13.413	433.57	388.25	5.4643	249	9.4698	499.07	434.88	5.7733
180	13.332	434.52	388.92	5.4696	250	9.4307	500.00	435.54	5.7771
181	13.252	435.47	389.59	5.4748	251	9.3919	500.93	436.20	5.7808
182	13.174	436.42	390.27	5.4801	252	9.3535	501.86	436.86	5.7845
183	13.096	437.36	390.94	5.4852	253	9.3154	502.79	437.52	5.7881
184	13.019	438.31	391.61	5.4904	254	9.2776	503.71	438.18	5.7918
185	12.943	439.26	392.28	5.4955	255	9.2401	504.64	438.85	5.7954
186	12.868	440.20	392.96	5.5006	256	9.2029	505.57	439.51	5.7991
187	12.794	441.15	393.63	5.5057	257	9.1661	506.50	440.17	5.8027
188	12.721	442.09	394.30	5.5107	258	9.1295	507.42	440.83	5.8063
189	12.649	443.03	394.97	5.5157	259	9.0932	508.35	441.49	5.8099
190	12.577	443.98	395.64	5.5207	260	9.0573	509.28	442.16	5.8134
191	12.507	444.92	396.31	5.5257	261	9.0216	510.21	442.82	5.8170
192	12.437	445.86	396.98	5.5306	262	8.9862	511.13	443.48	5.8206
193	12.368	446.81	397.65	5.5355	263	8.9511	512.06	444.14	5.8241
194	12.300	447.75	398.32	5.5404	264	8.9162	512.99	444.80	5.8276
195	12.233	448.69	398.99	5.5452	265	8.8817	513.91	445.46	5.8311
196	12.166	449.63	399.66	5.5500	266	8.8474	514.84	446.13	5.8346
197	12.101	450.57	400.33	5.5548	267	8.8134	515.77	446.79	5.8381
198	12.036	451.51	401.00	5.5595	268	8.7796	516.70	447.45	5.8415
199	11.971	452.45	401.66	5.5643	269	8.7462	517.62	448.11	5.8450
200	11.908	453.39	402.33	5.5690	270	8.7129	518.55	448.77	5.8484
201	11.845	454.33	403.00	5.5737	271	8.6800	519.48	449.44	5.8519
202	11.783	455.26	403.67	5.5783	272	8.6473	520.40	450.10	5.8553
203	11.721	456.20	404.34	5.5830	273	8.6148	521.33	450.76	5.8587
204	11.661	457.14	405.00	5.5876	274	8.5826	522.26	451.42	5.8621
205	11.600	458.08	405.67	5.5921	275	8.5506	523.18	452.08	5.8654
206	11.541	459.01	406.34	5.5967	276	8.5189	524.11	452.75	5.8688
207	11.482	459.95	407.00	5.6012	277	8.4874	525.04	453.41	5.8722
208	11.424	460.89	407.67	5.6058	278	8.4562	525.96	454.07	5.8755
209	11.366	461.82	408.34	5.6102	279	8.4252	526.89	454.73	5.8788
210	11.309	462.76	409.00	5.6147	280	8.3944	527.82	455.39	5.8821
211	11.253	463.69	409.67	5.6192	281	8.3638	528.75	456.06	5.8855
212	11.197	464.63	410.33	5.6236	282	8.3335	529.67	456.72	5.8887
213	11.142	465.56	411.00	5.6280	283	8.3034	530.60	457.38	5.8920
214	11.087	466.50	411.66	5.6324	284	8.2735	531.53	458.04	5.8953
215	11.033	467.43	412.33	5.6367	285	8.2439	532.45	458.71	5.8986
216	10.979	468.37	412.99	5.6410	286	8.2144	533.38	459.37	5.9018
217	10.926	469.30	413.66	5.6454	287	8.1852	534.31	460.03	5.9050
218	10.873	470.23	414.32	5.6496	288	8.1562	535.23	460.70	5.9083
219	10.821	471.17	414.99	5.6539	289	8.1274	536.16	461.36	5.9115
220	10.770	472.10	415.65	5.6582	290	8.0987	537.09	462.02	5.9147
221	10.719	473.03	416.32	5.6624	291	8.0703	538.02	462.69	5.9179
222	10.669	473.97	416.98	5.6666	292	8.0422	538.94	463.35	5.9211
223	10.619	474.90	417.64	5.6708	293	8.0142	539.87	464.01	5.9242
224	10.569	475.83	418.31	5.6750	294	7.9864	540.80	464.68	5.9274
225	10.520	476.76	418.97	5.6791	295	7.9587	541.73	465.34	5.9305
226	10.471	477.69	419.63	5.6832	296	7.9313	542.65	466.00	5.9337
227	10.423	478.62	420.30	5.6874	297	7.9041	543.58	466.67	5.9368
228	10.376	479.56	420.96	5.6915	298	7.8771	544.51	467.33	5.9399
229	10.329	480.49	421.63	5.6955	299	7.8503	545.44	467.99	5.9430
230	10.282	481.42	422.29	5.6996	300	7.8236	546.37	468.66	5.9461

TEMPERATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
55	1303.5	86.422	85.878	2.1724
56	1298.9	87.827	87.281	2.1977
57	1294.2	89.239	88.691	2.2227
58	1289.6	90.658	90.108	2.2474
59	1285.0	92.085	91.533	2.2718
60	1280.4	93.519	92.965	2.2959
61	1275.8	94.961	94.405	2.3197
62	1271.1	96.410	95.852	2.3433
63	1266.5	97.867	97.307	2.3666
64	1261.9	99.333	98.770	2.3897
65	1257.3	100.81	100.24	2.4125
66	1252.7	102.29	101.72	2.4351
67	1248.1	103.78	103.21	2.4576
68	1243.6	105.28	104.71	2.4798
69	1239.0	106.79	106.21	2.5018
70	1234.4	108.30	107.73	2.5236
71	1229.8	109.83	109.26	2.5453
72	1225.2	111.37	110.79	2.5668
73	1220.7	112.92	112.34	2.5881
74	1216.1	114.47	113.89	2.6093
75	1211.6	116.04	115.46	2.6304
76	1207.0	117.62	117.03	2.6513
77	1202.5	119.21	118.62	2.6720
78	1197.9	120.81	120.22	2.6927
79	1193.4	122.42	121.82	2.7132
80	1188.8	124.04	123.44	2.7336
81	1184.3	125.67	125.07	2.7538
82	1179.8	127.31	126.71	2.7740
83	1175.3	128.96	128.36	2.7940
84	1170.7	130.62	130.02	2.8139
85	1166.2	132.29	131.69	2.8337
86	1161.8	133.96	133.35	2.8532
87	1156.9	135.65	135.04	2.8727
88	1152.0	137.35	136.74	2.8921
89	1147.0	139.06	138.44	2.9114
90	1142.0	140.78	140.16	2.9306
91	1137.0	142.50	141.88	2.9497
92	1131.8	144.24	143.61	2.9686
93	1126.7	145.98	145.35	2.9875
94	1121.5	147.73	147.10	3.0062
95	1116.2	149.49	148.85	3.0248
96	1111.0	151.25	150.62	3.0433
97	1105.6	153.03	152.38	3.0617
98	1100.2	154.80	154.16	3.0799
99	1094.8	156.59	155.94	3.0980
100	1089.3	158.38	157.73	3.1160
101	1083.8	160.18	159.52	3.1339
102	1078.2	161.98	161.32	3.1517
103	1072.6	163.79	163.13	3.1693
104	1066.9	165.60	164.93	3.1868
105	1061.2	167.42	166.75	3.2042
106	1055.4	169.24	168.57	3.2215
107	1049.5	171.07	170.39	3.2386
108	1043.6	172.90	172.22	3.2557
109	1037.6	174.73	174.05	3.2726
110	1031.6	176.57	175.89	3.2894
111	1025.5	178.42	177.73	3.3061
112	1019.3	180.27	179.57	3.3227
113	1013.0	182.12	181.42	3.3392
114	1006.6	183.99	183.28	3.3556
● 114.004	1006.6	183.99	183.29	3.3556
● 114.004	27.448	367.41	341.56	4.9644
115	27.097	368.51	342.34	4.9741
116	26.756	369.62	343.11	4.9837
117	26.426	370.72	343.88	4.9932
118	26.106	371.82	344.65	5.0025
119	25.796	372.90	345.41	5.0117
120	25.495	373.99	346.17	5.0207
121	25.203	375.06	346.92	5.0297
122	24.919	376.14	347.67	5.0385
123	24.643	377.20	348.42	5.0472
124	24.375	378.27	349.17	5.0558
125	24.114	379.33	349.91	5.0643
126	23.859	380.38	350.65	5.0727
127	23.611	381.43	351.39	5.0810
128	23.370	382.48	352.13	5.0892
129	23.134	383.52	352.86	5.0973
130	22.904	384.56	353.59	5.1054
131	22.679	385.59	354.32	5.1133
132	22.459	386.63	355.05	5.1211
133	22.245	387.66	355.77	5.1289
134	22.035	388.68	356.49	5.1366
135	21.830	389.70	357.21	5.1442
136	21.630	390.73	357.93	5.1517
137	21.434	391.74	358.65	5.1592
138	21.242	392.76	359.37	5.1666
139	21.054	393.77	360.08	5.1739
140	20.869	394.78	360.80	5.1811
141	20.689	395.79	361.51	5.1883
142	20.512	396.80	362.22	5.1954
143	20.338	397.80	362.93	5.2025
144	20.168	398.80	363.63	5.2094
145	20.001	399.80	364.34	5.2164
146	19.838	400.80	365.04	5.2232
147	19.677	401.79	365.75	5.2300
148	19.519	402.79	366.45	5.2367
149	19.364	403.78	367.15	5.2434
150	19.212	404.77	367.85	5.2500
151	19.063	405.76	368.55	5.2566
152	18.916	406.74	369.25	5.2631
153	18.771	407.73	369.95	5.2696
154	18.630	408.71	370.64	5.2760
155	18.490	409.70	371.34	5.2824
156	18.353	410.68	372.03	5.2887
157	18.218	411.66	372.72	5.2949
158	18.085	412.63	373.42	5.3011
159	17.955	413.61	374.11	5.3073
160	17.826	414.59	374.80	5.3134

● PHASE CHANGE

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
161	17.700	415.56	375.49	5.3195	231	11.963	481.95	422.66	5.6623
162	17.576	416.53	376.18	5.3255	232	11.909	482.88	423.32	5.6663
163	17.453	417.51	376.87	5.3315	233	11.855	483.82	423.99	5.6703
164	17.332	418.48	377.55	5.3374	234	11.802	484.75	424.65	5.6743
165	17.214	419.45	378.24	5.3433	235	11.750	485.68	425.32	5.6783
166	17.096	420.42	378.93	5.3492	236	11.698	486.61	425.98	5.6823
167	16.981	421.38	379.61	5.3550	237	11.646	487.55	426.65	5.6862
168	16.868	422.35	380.30	5.3608	238	11.595	488.48	427.31	5.6901
169	16.756	423.31	380.98	5.3665	239	11.545	489.41	427.98	5.6941
170	16.645	424.28	381.67	5.3722	240	11.495	490.34	428.64	5.6979
171	16.537	425.24	382.35	5.3778	241	11.445	491.28	429.30	5.7018
172	16.429	426.21	383.03	5.3834	242	11.396	492.21	429.97	5.7057
173	16.324	427.17	383.72	5.3890	243	11.347	493.14	430.63	5.7095
174	16.219	428.13	384.40	5.3946	244	11.299	494.07	431.30	5.7133
175	16.117	429.09	385.08	5.4001	245	11.251	495.00	431.96	5.7172
176	16.015	430.05	385.76	5.4055	246	11.203	495.93	432.62	5.7210
177	15.915	431.01	386.44	5.4110	247	11.156	496.87	433.29	5.7247
178	15.816	431.96	387.12	5.4163	248	11.109	497.80	433.95	5.7285
179	15.719	432.92	387.80	5.4217	249	11.063	498.73	434.61	5.7322
180	15.623	433.88	388.48	5.4270	250	11.017	499.66	435.28	5.7360
181	15.528	434.83	389.15	5.4323	251	10.971	500.59	435.94	5.7397
182	15.435	435.79	389.83	5.4376	252	10.926	501.52	436.61	5.7434
183	15.342	436.74	390.51	5.4428	253	10.882	502.45	437.27	5.7471
184	15.251	437.69	391.19	5.4480	254	10.837	503.38	437.93	5.7507
185	15.161	438.64	391.86	5.4532	255	10.793	504.31	438.60	5.7544
186	15.072	439.60	392.54	5.4583	256	10.750	505.24	439.26	5.7580
187	14.984	440.55	393.21	5.4634	257	10.706	506.17	439.92	5.7617
188	14.898	441.50	393.89	5.4685	258	10.663	507.10	440.59	5.7653
189	14.812	442.45	394.56	5.4735	259	10.621	508.03	441.25	5.7689
190	14.727	443.40	395.24	5.4785	260	10.579	508.96	441.91	5.7724
191	14.644	444.35	395.91	5.4835	261	10.537	509.89	442.57	5.7760
192	14.561	445.29	396.59	5.4885	262	10.495	510.82	443.24	5.7796
193	14.480	446.24	397.26	5.4934	263	10.454	511.75	443.90	5.7831
194	14.399	447.19	397.93	5.4983	264	10.413	512.68	444.56	5.7866
195	14.320	448.14	398.60	5.5031	265	10.373	513.61	445.23	5.7902
196	14.241	449.08	399.28	5.5080	266	10.332	514.54	445.89	5.7937
197	14.163	450.03	399.95	5.5128	267	10.293	515.47	446.55	5.7971
198	14.086	450.97	400.62	5.5176	268	10.253	516.39	447.22	5.8006
199	14.010	451.92	401.29	5.5223	269	10.214	517.32	447.88	5.8041
200	13.935	452.86	401.96	5.5271	270	10.175	518.25	448.54	5.8075
201	13.861	453.81	402.63	5.5318	271	10.136	519.18	449.21	5.8110
202	13.787	454.75	403.30	5.5365	272	10.098	520.11	449.87	5.8144
203	13.715	455.69	403.97	5.5411	273	10.060	521.04	450.53	5.8178
204	13.643	456.63	404.64	5.5457	274	10.022	521.97	451.20	5.8212
205	13.572	457.58	405.31	5.5503	275	9.9844	522.90	451.86	5.8246
206	13.501	458.52	405.98	5.5549	276	9.9472	523.83	452.52	5.8279
207	13.432	459.46	406.65	5.5595	277	9.9103	524.76	453.19	5.8313
208	13.363	460.40	407.32	5.5640	278	9.8737	525.68	453.85	5.8346
209	13.295	461.34	407.99	5.5685	279	9.8373	526.61	454.51	5.8380
210	13.228	462.28	408.66	5.5730	280	9.8013	527.54	455.18	5.8413
211	13.161	463.22	409.33	5.5775	281	9.7655	528.47	455.84	5.8446
212	13.095	464.16	410.00	5.5819	282	9.7299	529.40	456.50	5.8479
213	13.030	465.10	410.66	5.5863	283	9.6946	530.33	457.17	5.8512
214	12.966	466.04	411.33	5.5907	284	9.6596	531.26	457.83	5.8545
215	12.902	466.97	412.00	5.5951	285	9.6249	532.19	458.49	5.8577
216	12.839	467.91	412.67	5.5995	286	9.5904	533.12	459.16	5.8610
217	12.776	468.85	413.33	5.6038	287	9.5561	534.04	459.82	5.8642
218	12.714	469.79	414.00	5.6081	288	9.5221	534.97	460.49	5.8675
219	12.653	470.72	414.67	5.6124	289	9.4884	535.90	461.15	5.8707
220	12.592	471.66	415.34	5.6167	290	9.4549	536.83	461.81	5.8739
221	12.532	472.60	416.00	5.6209	291	9.4216	537.76	462.48	5.8771
222	12.473	473.53	416.67	5.6251	292	9.3886	538.69	463.14	5.8803
223	12.414	474.47	417.33	5.6293	293	9.3558	539.62	463.81	5.8835
224	12.356	475.41	418.00	5.6335	294	9.3232	540.55	464.47	5.8866
225	12.298	476.34	418.67	5.6377	295	9.2909	541.48	465.14	5.8898
226	12.241	477.28	419.33	5.6418	296	9.2588	542.41	465.80	5.8929
227	12.184	478.21	420.00	5.6460	297	9.2269	543.34	466.47	5.8961
228	12.128	479.15	420.66	5.6501	298	9.1953	544.27	467.13	5.8992
229	12.072	480.08	421.33	5.6542	299	9.1638	545.19	467.80	5.9023
230	12.017	481.01	421.99	5.6582	300	9.1326	546.12	468.46	5.9054

8.00 ATMOSPHERE ISOBAR

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
					91	1137.2	142.56	141.84	2.9493
					92	1132.1	144.29	143.57	2.9682
					93	1126.9	146.03	145.31	2.9871
					94	1121.7	147.78	147.06	3.0058
					95	1116.5	149.54	148.81	3.0244
					96	1111.2	151.30	150.57	3.0429
					97	1105.9	153.07	152.34	3.0612
					98	1100.5	154.85	154.12	3.0794
					99	1095.1	156.64	155.90	3.0976
					100	1089.6	158.43	157.68	3.1156
					101	1084.1	160.22	159.47	3.1334
					102	1078.5	162.02	161.27	3.1512
					103	1072.9	163.83	163.07	3.1688
					104	1067.3	165.64	164.88	3.1863
					105	1061.5	167.46	166.69	3.2037
					106	1055.7	169.28	168.51	3.2209
					107	1049.9	171.10	170.33	3.2381
					108	1044.0	172.93	172.16	3.2551
					109	1038.0	174.77	173.99	3.2720
					110	1032.0	176.61	175.82	3.2888
					111	1025.9	178.45	177.66	3.3055
					112	1019.7	180.30	179.51	3.3221
					113	1013.4	182.15	181.35	3.3385
					114	1007.1	184.01	183.21	3.3549
					115	1000.7	185.88	185.07	3.3712
					116	994.13	187.75	186.94	3.3874
					• 116.130	993.27	187.99	187.18	3.3895
					• 116.130	31.239	368.01	342.06	4.9396
					117	30.880	369.00	342.75	4.9481
					118	30.481	370.14	343.54	4.9578
					119	30.096	371.26	344.33	4.9673
					120	29.723	372.38	345.11	4.9767
					121	29.362	373.50	345.89	4.9859
					122	29.012	374.60	346.66	4.9951
					123	28.673	375.70	347.43	5.0040
					124	28.344	376.80	348.20	5.0129
55	1303.6	86.485	85.863	2.1721	125	28.025	377.89	348.96	5.0216
56	1299.0	87.889	87.265	2.1974	126	27.714	378.97	349.72	5.0303
57	1294.4	89.301	88.675	2.2224	127	27.412	380.05	350.48	5.0388
58	1289.7	90.721	90.092	2.2471	128	27.118	381.12	351.23	5.0472
59	1285.1	92.147	91.516	2.2715	129	26.832	382.19	351.98	5.0555
60	1280.5	93.581	92.948	2.2956	130	26.554	383.25	352.73	5.0637
61	1275.9	95.023	94.387	2.3194	131	26.282	384.31	353.47	5.0719
62	1271.3	96.472	95.834	2.3430	132	26.017	385.37	354.21	5.0799
63	1266.7	97.929	97.289	2.3663	133	25.759	386.42	354.95	5.0878
64	1262.1	99.394	98.752	2.3894	134	25.507	387.47	355.69	5.0957
65	1257.5	100.87	100.22	2.4122	135	25.260	388.51	356.42	5.1034
66	1252.9	102.35	101.70	2.4348	136	25.020	389.55	357.16	5.1111
67	1248.3	103.84	103.19	2.4573	137	24.785	390.59	357.89	5.1187
68	1243.7	105.34	104.69	2.4795	138	24.555	391.63	358.61	5.1262
69	1239.1	106.85	106.19	2.5015	139	24.330	392.66	359.34	5.1337
70	1234.5	108.37	107.71	2.5233	140	24.110	393.69	360.07	5.1411
71	1230.0	109.89	109.23	2.5450	141	23.895	394.71	360.79	5.1484
72	1225.4	111.43	110.77	2.5665	142	23.684	395.73	361.51	5.1556
73	1220.8	112.98	112.31	2.5878	143	23.478	396.75	362.23	5.1627
74	1216.3	114.53	113.87	2.6090	144	23.275	397.77	362.95	5.1698
75	1211.7	116.10	115.43	2.6301	145	23.077	398.79	363.66	5.1769
76	1207.2	117.68	117.01	2.6510	146	22.883	399.80	364.38	5.1838
77	1202.6	119.27	118.59	2.6717	147	22.693	400.81	365.09	5.1907
78	1198.1	120.87	120.19	2.6924	148	22.506	401.82	365.80	5.1976
79	1193.6	122.48	121.80	2.7129	149	22.322	402.82	366.51	5.2043
80	1189.0	124.10	123.41	2.7332	150	22.142	403.83	367.22	5.2110
81	1184.5	125.73	125.04	2.7535	151	21.966	404.83	367.93	5.2177
82	1180.0	127.37	126.68	2.7736	152	21.792	405.83	368.63	5.2243
83	1175.4	129.02	128.33	2.7936	153	21.622	406.83	369.34	5.2308
84	1170.9	130.68	129.99	2.8135	154	21.455	407.82	370.04	5.2373
85	1166.4	132.35	131.66	2.8333	155	21.291	408.82	370.74	5.2438
86	1162.0	134.02	133.32	2.8528	156	21.129	409.81	371.45	5.2502
87	1157.1	135.71	135.01	2.8723	157	20.971	410.80	372.15	5.2565
88	1152.2	137.41	136.70	2.8917	158	20.815	411.79	372.85	5.2628
89	1147.3	139.11	138.41	2.9110	159	20.661	412.78	373.55	5.2690
90	1142.3	140.83	140.12	2.9302	160	20.510	413.76	374.24	5.2752

• PHASE CHANGE

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
161	20.362	414.75	374.94	5.2813	231	13.697	481.55	422.37	5.6263
162	20.216	415.73	375.64	5.2874	232	13.634	482.48	423.03	5.6304
163	20.072	416.71	376.33	5.2935	233	13.573	483.42	423.70	5.6344
164	19.931	417.70	377.02	5.2994	234	13.512	484.36	424.37	5.6384
165	19.791	418.67	377.72	5.3054	235	13.451	485.29	425.03	5.6424
166	19.654	419.65	378.41	5.3113	236	13.391	486.23	425.70	5.6464
167	19.519	420.63	379.10	5.3172	237	13.332	487.17	426.37	5.6503
168	19.387	421.60	379.79	5.3230	238	13.273	488.10	427.03	5.6543
169	19.256	422.58	380.48	5.3288	239	13.215	489.04	427.70	5.6582
170	19.127	423.55	381.17	5.3345	240	13.157	489.97	428.36	5.6621
171	19.000	424.52	381.86	5.3402	241	13.100	490.91	429.03	5.6660
172	18.874	425.50	382.55	5.3459	242	13.043	491.84	429.70	5.6698
173	18.751	426.47	383.24	5.3515	243	12.987	492.78	430.36	5.6737
174	18.629	427.43	383.92	5.3571	244	12.931	493.71	431.03	5.6775
175	18.509	428.40	384.61	5.3626	245	12.876	494.65	431.69	5.6814
176	18.391	429.37	385.29	5.3682	246	12.822	495.58	432.36	5.6852
177	18.275	430.33	385.98	5.3736	247	12.767	496.51	433.02	5.6890
178	18.160	431.30	386.66	5.3791	248	12.714	497.45	433.69	5.6927
179	18.046	432.26	387.35	5.3845	249	12.660	498.38	434.35	5.6965
180	17.934	433.23	388.03	5.3898	250	12.607	499.31	435.02	5.7002
181	17.824	434.19	388.71	5.3952	251	12.555	500.25	435.68	5.7040
182	17.715	435.15	389.39	5.4005	252	12.503	501.18	436.35	5.7077
183	17.608	436.11	390.07	5.4057	253	12.452	502.11	437.01	5.7114
184	17.502	437.07	390.76	5.4109	254	12.401	503.05	437.68	5.7150
185	17.397	438.03	391.44	5.4161	255	12.350	503.98	438.34	5.7187
186	17.294	438.99	392.12	5.4213	256	12.300	504.91	439.01	5.7224
187	17.192	439.95	392.80	5.4264	257	12.250	505.84	439.67	5.7260
188	17.091	440.90	393.47	5.4316	258	12.201	506.78	440.34	5.7296
189	16.992	441.86	394.15	5.4366	259	12.152	507.71	441.00	5.7332
190	16.893	442.81	394.83	5.4417	260	12.103	508.64	441.67	5.7368
191	16.796	443.77	395.51	5.4467	261	12.055	509.57	442.33	5.7404
192	16.701	444.72	396.19	5.4517	262	12.007	510.50	443.00	5.7439
193	16.606	445.68	396.86	5.4566	263	11.960	511.44	443.66	5.7475
194	16.513	446.63	397.54	5.4615	264	11.913	512.37	444.33	5.7510
195	16.420	447.58	398.22	5.4664	265	11.867	513.30	444.99	5.7546
196	16.329	448.53	398.89	5.4713	266	11.820	514.23	445.65	5.7581
197	16.239	449.48	399.57	5.4761	267	11.775	515.16	446.32	5.7616
198	16.150	450.43	400.24	5.4810	268	11.729	516.09	446.98	5.7650
199	16.062	451.38	400.92	5.4857	269	11.684	517.03	447.65	5.7685
200	15.975	452.33	401.59	5.4905	270	11.639	517.96	448.31	5.7720
201	15.889	453.28	402.26	5.4952	271	11.595	518.89	448.98	5.7754
202	15.804	454.23	402.94	5.4999	272	11.551	519.82	449.64	5.7788
203	15.719	455.18	403.61	5.5046	273	11.507	520.75	450.31	5.7823
204	15.636	456.13	404.29	5.5093	274	11.464	521.68	450.97	5.7857
205	15.554	457.07	404.96	5.5139	275	11.421	522.61	451.64	5.7890
206	15.473	458.02	405.63	5.5185	276	11.378	523.54	452.30	5.7924
207	15.392	458.96	406.30	5.5231	277	11.336	524.47	452.96	5.7958
208	15.313	459.91	406.97	5.5276	278	11.294	525.40	453.63	5.7991
209	15.234	460.85	407.65	5.5322	279	11.252	526.34	454.29	5.8025
210	15.156	461.80	408.32	5.5367	280	11.210	527.27	454.96	5.8058
211	15.080	462.74	408.99	5.5412	281	11.169	528.20	455.62	5.8091
212	15.003	463.69	409.66	5.5456	282	11.128	529.13	456.29	5.8124
213	14.928	464.63	410.33	5.5501	283	11.088	530.06	456.95	5.8157
214	14.854	465.57	411.00	5.5545	284	11.048	530.99	457.62	5.8190
215	14.780	466.52	411.67	5.5589	285	11.008	531.92	458.28	5.8223
216	14.707	467.46	412.34	5.5632	286	10.968	532.85	458.95	5.8256
217	14.635	468.40	413.01	5.5676	287	10.929	533.78	459.61	5.8288
218	14.563	469.34	413.68	5.5719	288	10.890	534.71	460.28	5.8320
219	14.492	470.28	414.35	5.5762	289	10.851	535.64	460.94	5.8353
220	14.422	471.22	415.02	5.5805	290	10.813	536.57	461.61	5.8385
221	14.353	472.16	415.69	5.5848	291	10.775	537.50	462.27	5.8417
222	14.284	473.10	416.36	5.5890	292	10.737	538.44	462.94	5.8449
223	14.217	474.04	417.02	5.5932	293	10.699	539.37	463.60	5.8481
224	14.149	474.98	417.69	5.5974	294	10.662	540.30	464.27	5.8512
225	14.083	475.92	418.36	5.6016	295	10.625	541.23	464.93	5.8544
226	14.017	476.86	419.03	5.6058	296	10.588	542.16	465.60	5.8575
227	13.951	477.80	419.70	5.6099	297	10.551	543.09	466.27	5.8607
228	13.887	478.74	420.36	5.6141	298	10.515	544.02	466.93	5.8638
229	13.823	479.67	421.03	5.6182	299	10.479	544.95	467.60	5.8669
230	13.759	480.61	421.70	5.6222	300	10.443	545.88	468.26	5.8700

TEMPERATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
91	1137.4	142.61	141.81	2.9489
92	1132.3	144.34	143.54	2.9678
93	1127.2	146.08	145.27	2.9867
94	1122.0	147.83	147.02	3.0054
95	1116.8	149.59	148.77	3.0240
96	1111.5	151.35	150.53	3.0424
97	1106.2	153.12	152.30	3.0608
98	1100.8	154.90	154.07	3.0790
99	1095.4	156.68	155.85	3.0971
100	1089.9	158.47	157.64	3.1151
101	1084.4	160.27	159.43	3.1329
102	1078.9	162.07	161.22	3.1507
103	1073.2	163.87	163.02	3.1683
104	1067.6	165.68	164.83	3.1858
105	1061.9	167.50	166.64	3.2032
106	1056.1	169.32	168.46	3.2204
107	1050.3	171.14	170.27	3.2375
108	1044.4	172.97	172.10	3.2546
109	1038.4	174.81	173.93	3.2714
110	1032.4	176.64	175.76	3.2882
111	1026.3	178.48	177.60	3.3049
112	1020.1	180.33	179.44	3.3215
113	1013.9	182.18	181.28	3.3379
114	1007.6	184.04	183.14	3.3543
115	1001.1	185.90	184.99	3.3706
116	994.63	187.77	186.86	3.3868
117	988.01	189.65	188.73	3.4029
118	981.29	191.54	190.61	3.4189
• 118.071	980.81	191.67	190.74	3.4200
• 118.071	35.052	368.45	342.44	4.9173
119	34.612	369.54	343.20	4.9265
120	34.154	370.71	344.01	4.9362
121	33.713	371.86	344.81	4.9458
122	33.286	373.01	345.61	4.9552
123	32.874	374.14	346.40	4.9645
124	32.475	375.27	347.19	4.9737
125	32.089	376.40	347.98	4.9827
126	31.714	377.51	348.76	4.9916
127	31.351	378.62	349.53	5.0003
128	30.998	379.72	350.30	5.0090
129	30.656	380.82	351.07	5.0175
130	30.323	381.91	351.84	5.0260
131	29.999	383.00	352.60	5.0343
132	29.683	384.08	353.36	5.0425
133	29.376	385.15	354.11	5.0506
134	29.077	386.23	354.86	5.0586
135	28.785	387.29	355.61	5.0666
136	28.501	388.35	356.36	5.0744
137	28.223	389.41	357.10	5.0822
138	27.952	390.47	357.84	5.0898
139	27.687	391.52	358.58	5.0974
140	27.428	392.57	359.32	5.1049
141	27.175	393.61	360.05	5.1124
142	26.928	394.65	360.79	5.1197
143	26.685	395.69	361.52	5.1270
144	26.449	396.72	362.24	5.1342
145	26.217	397.75	362.97	5.1414
146	25.989	398.78	363.70	5.1484
147	25.767	399.81	364.42	5.1554
148	25.549	400.83	365.14	5.1624
149	25.335	401.85	365.86	5.1692
150	25.126	402.87	366.58	5.1760
151	24.920	403.89	367.29	5.1828
152	24.718	404.90	368.01	5.1895
153	24.521	405.91	368.72	5.1961
154	24.326	406.92	369.43	5.2027
155	24.136	407.93	370.14	5.2092
156	23.949	408.93	370.85	5.2157
157	23.765	409.94	371.56	5.2221
158	23.584	410.94	372.27	5.2284
159	23.406	411.94	372.98	5.2347
160	23.232	412.93	373.68	5.2410

TEMPERATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
55	1303.7	86.547	85.848	2.1719
56	1299.1	87.952	87.250	2.1972
57	1294.5	89.364	88.659	2.2221
58	1289.8	90.783	90.076	2.2468
59	1285.2	92.209	91.500	2.2712
60	1280.6	93.643	92.931	2.2953
61	1276.0	95.085	94.370	2.3191
62	1271.4	96.534	95.816	2.3427
63	1266.8	97.991	97.271	2.3660
64	1262.2	99.456	98.733	2.3891
65	1257.6	100.93	100.20	2.4119
66	1253.0	102.41	101.68	2.4345
67	1248.4	103.90	103.17	2.4570
68	1243.8	105.40	104.67	2.4792
69	1239.3	106.91	106.17	2.5012
70	1234.7	108.43	107.69	2.5230
71	1230.1	109.95	109.21	2.5447
72	1225.6	111.49	110.75	2.5662
73	1221.0	113.04	112.29	2.5875
74	1216.4	114.59	113.84	2.6087
75	1211.9	116.16	115.41	2.6297
76	1207.3	117.74	116.98	2.6506
77	1202.8	119.33	118.57	2.6714
78	1198.3	120.93	120.17	2.6920
79	1193.7	122.54	121.77	2.7125
80	1189.2	124.16	123.39	2.7329
81	1184.7	125.79	125.02	2.7532
82	1180.1	127.43	126.65	2.7733
83	1175.6	129.08	128.30	2.7933
84	1171.1	130.74	129.96	2.8132
85	1166.6	132.41	131.63	2.8330
86	1162.2	134.07	133.29	2.8525
87	1157.3	135.76	134.97	2.8720
88	1152.4	137.46	136.67	2.8914
89	1147.5	139.17	138.37	2.9107
90	1142.5	140.88	140.09	2.9298

• PHASE CHANGE

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
161	23.060	413.93	374.38	5.2472	231	15.437	481.15	422.07	5.5944
162	22.892	414.92	375.09	5.2533	232	15.366	482.09	422.74	5.5985
163	22.726	415.92	375.79	5.2595	233	15.296	483.03	423.41	5.6025
164	22.562	416.91	376.49	5.2655	234	15.227	483.97	424.08	5.6066
165	22.402	417.90	377.19	5.2715	235	15.158	484.91	424.75	5.6106
166	22.244	418.88	377.89	5.2775	236	15.090	485.85	425.41	5.6146
167	22.088	419.87	378.58	5.2834	237	15.023	486.78	426.08	5.6185
168	21.935	420.85	379.28	5.2893	238	14.956	487.72	426.75	5.6225
169	21.784	421.84	379.98	5.2951	239	14.890	488.66	427.42	5.6264
170	21.636	422.82	380.67	5.3009	240	14.825	489.60	428.09	5.6303
171	21.490	423.80	381.37	5.3067	241	14.760	490.54	428.75	5.6342
172	21.346	424.78	382.06	5.3124	242	14.696	491.48	429.42	5.6381
173	21.204	425.76	382.75	5.3181	243	14.632	492.41	430.09	5.6420
174	21.064	426.74	383.44	5.3237	244	14.569	493.35	430.76	5.6458
175	20.927	427.71	384.13	5.3293	245	14.506	494.29	431.42	5.6497
176	20.791	428.69	384.82	5.3348	246	14.445	495.22	432.09	5.6535
177	20.657	429.66	385.51	5.3404	247	14.383	496.16	432.76	5.6573
178	20.525	430.63	386.20	5.3458	248	14.322	497.10	433.43	5.6611
179	20.395	431.60	386.89	5.3513	249	14.262	498.03	434.09	5.6648
180	20.267	432.57	387.58	5.3567	250	14.202	498.97	434.76	5.6686
181	20.141	433.54	388.27	5.3621	251	14.143	499.91	435.43	5.6723
182	20.016	434.51	388.95	5.3674	252	14.084	500.84	436.09	5.6760
183	19.893	435.48	389.64	5.3727	253	14.026	501.78	436.76	5.6797
184	19.771	436.45	390.32	5.3780	254	13.968	502.71	437.43	5.6834
185	19.652	437.41	391.01	5.3832	255	13.911	503.65	438.09	5.6871
186	19.533	438.38	391.69	5.3884	256	13.854	504.58	438.76	5.6908
187	19.417	439.34	392.38	5.3936	257	13.798	505.52	439.42	5.6944
188	19.302	440.30	393.06	5.3987	258	13.742	506.45	440.09	5.6980
189	19.188	441.27	393.74	5.4038	259	13.686	507.39	440.76	5.7017
190	19.076	442.23	394.42	5.4089	260	13.631	508.32	441.42	5.7053
191	18.965	443.19	395.10	5.4139	261	13.577	509.26	442.09	5.7088
192	18.855	444.15	395.79	5.4189	262	13.523	510.19	442.75	5.7124
193	18.747	445.11	396.47	5.4239	263	13.469	511.12	443.42	5.7160
194	18.641	446.07	397.15	5.4289	264	13.416	512.06	444.09	5.7195
195	18.535	447.02	397.83	5.4338	265	13.364	512.99	444.75	5.7230
196	18.431	447.98	398.50	5.4387	266	13.311	513.93	445.42	5.7266
197	18.328	448.94	399.18	5.4436	267	13.260	514.86	446.08	5.7301
198	18.227	449.89	399.86	5.4484	268	13.208	515.79	446.75	5.7336
199	18.126	450.85	400.54	5.4532	269	13.157	516.73	447.42	5.7370
200	18.027	451.80	401.22	5.4580	270	13.106	517.66	448.08	5.7405
201	17.929	452.76	401.89	5.4628	271	13.056	518.59	448.75	5.7439
202	17.832	453.71	402.57	5.4675	272	13.006	519.53	449.41	5.7474
203	17.736	454.66	403.25	5.4722	273	12.957	520.46	450.08	5.7508
204	17.641	455.62	403.92	5.4769	274	12.908	521.39	450.74	5.7542
205	17.548	456.57	404.60	5.4815	275	12.859	522.33	451.41	5.7576
206	17.455	457.52	405.27	5.4862	276	12.811	523.26	452.08	5.7610
207	17.364	458.47	405.95	5.4908	277	12.763	524.19	452.74	5.7644
208	17.273	459.42	406.62	5.4953	278	12.716	525.12	453.41	5.7677
209	17.184	460.37	407.30	5.4999	279	12.668	526.06	454.07	5.7711
210	17.095	461.32	407.97	5.5044	280	12.622	526.99	454.74	5.7744
211	17.008	462.27	408.65	5.5089	281	12.575	527.92	455.41	5.7778
212	16.921	463.21	409.32	5.5134	282	12.529	528.86	456.07	5.7811
213	16.835	464.16	409.99	5.5179	283	12.483	529.79	456.74	5.7844
214	16.751	465.11	410.67	5.5223	284	12.438	530.72	457.40	5.7877
215	16.667	466.05	411.34	5.5267	285	12.393	531.65	458.07	5.7909
216	16.584	467.00	412.01	5.5311	286	12.348	532.59	458.73	5.7942
217	16.502	467.95	412.68	5.5355	287	12.304	533.52	459.40	5.7975
218	16.420	468.89	413.36	5.5398	288	12.260	534.45	460.07	5.8007
219	16.340	469.84	414.03	5.5441	289	12.216	535.38	460.73	5.8039
220	16.261	470.78	414.70	5.5484	290	12.172	536.32	461.40	5.8072
221	16.182	471.73	415.37	5.5527	291	12.129	537.25	462.07	5.8104
222	16.104	472.67	416.04	5.5570	292	12.087	538.18	462.73	5.8136
223	16.027	473.61	416.71	5.5612	293	12.044	539.11	463.40	5.8168
224	15.950	474.56	417.38	5.5655	294	12.002	540.05	464.06	5.8199
225	15.875	475.50	418.05	5.5696	295	11.960	540.98	464.73	5.8231
226	15.800	476.44	418.72	5.5738	296	11.918	541.91	465.40	5.8263
227	15.726	477.38	419.39	5.5780	297	11.877	542.84	466.06	5.8294
228	15.652	478.32	420.06	5.5821	298	11.836	543.78	466.73	5.8325
229	15.580	479.27	420.73	5.5862	299	11.795	544.71	467.40	5.8357
230	15.508	480.21	421.40	5.5903	300	11.755	545.64	468.07	5.8388

10.00 ATMOSPHERE ISOBAR

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
					91	1137.7	142.66	141.77	2.9485
					92	1132.6	144.39	143.50	2.9674
					93	1127.4	146.13	145.24	2.9862
					94	1122.2	147.88	146.98	3.0049
					95	1117.0	149.64	148.73	3.0235
					96	1111.7	151.40	150.49	3.0420
					97	1106.4	153.17	152.26	3.0603
					98	1101.1	154.95	154.03	3.0785
					99	1095.7	156.73	155.81	3.0966
					100	1090.2	158.52	157.59	3.1146
					101	1084.7	160.31	159.38	3.1325
					102	1079.2	162.11	161.17	3.1502
					103	1073.6	163.92	162.97	3.1678
					104	1067.9	165.73	164.78	3.1853
					105	1062.2	167.54	166.59	3.2026
					106	1056.4	169.36	168.40	3.2199
					107	1050.6	171.18	170.22	3.2370
					108	1044.8	173.01	172.04	3.2540
					109	1038.8	174.84	173.87	3.2709
					110	1032.8	176.68	175.70	3.2877
					111	1026.7	178.52	177.53	3.3043
					112	1020.6	180.36	179.37	3.3209
					113	1014.3	182.21	181.22	3.3373
					114	1008.0	184.07	183.06	3.3537
					115	1001.6	185.93	184.92	3.3699
					116	995.12	187.80	186.78	3.3861
					117	988.53	189.67	188.65	3.4022
					118	981.83	191.56	190.52	3.4182
					119	975.02	193.45	192.41	3.4341
					• 119.863	969.04	195.09	194.04	3.4479
					• 119.863	38.893	368.78	342.73	4.8970
					120	38.818	368.95	342.84	4.8984
					121	38.281	370.15	343.68	4.9083
					122	37.765	371.34	344.51	4.9181
					123	37.267	372.52	345.33	4.9278
					124	36.787	373.69	346.14	4.9372
55	1303.8	86.610	85.833	2.1716	125	36.324	374.85	346.95	4.9465
56	1299.2	88.014	87.234	2.1969	126	35.876	376.00	347.75	4.9557
57	1294.6	89.426	88.643	2.2219	127	35.443	377.14	348.55	4.9648
58	1290.0	90.845	90.060	2.2465	128	35.023	378.28	349.34	4.9737
59	1285.3	92.271	91.483	2.2709	129	34.617	379.40	350.13	4.9824
60	1280.7	93.705	92.914	2.2950	130	34.222	380.53	350.92	4.9911
61	1276.1	95.147	94.353	2.3189	131	33.839	381.64	351.70	4.9996
62	1271.5	96.596	95.799	2.3424	132	33.467	382.75	352.47	5.0081
63	1266.9	98.052	97.253	2.3657	133	33.106	383.85	353.24	5.0164
64	1262.3	99.517	98.715	2.3888	134	32.754	384.95	354.01	5.0246
65	1257.7	100.99	100.18	2.4116	135	32.412	386.04	354.78	5.0327
66	1253.1	102.47	101.66	2.4342	136	32.079	387.13	355.54	5.0407
67	1248.6	103.96	103.15	2.4567	137	31.754	388.21	356.30	5.0487
68	1244.0	105.46	104.65	2.4789	138	31.438	389.28	357.05	5.0565
69	1239.4	106.97	106.15	2.5009	139	31.129	390.36	357.81	5.0642
70	1234.8	108.49	107.67	2.5227	140	30.828	391.42	358.56	5.0719
71	1230.3	110.01	109.19	2.5444	141	30.534	392.49	359.30	5.0795
72	1225.7	111.55	110.72	2.5659	142	30.246	393.55	360.05	5.0870
73	1221.2	113.10	112.27	2.5872	143	29.966	394.60	360.79	5.0944
74	1216.6	114.65	113.82	2.6084	144	29.691	395.66	361.53	5.1017
75	1212.1	116.22	115.39	2.6294	145	29.423	396.70	362.27	5.1090
76	1207.5	117.80	116.96	2.6503	146	29.160	397.75	363.00	5.1161
77	1203.0	119.39	118.55	2.6711	147	28.903	398.79	363.74	5.1233
78	1198.4	120.99	120.14	2.6917	148	28.652	399.83	364.47	5.1303
79	1193.9	122.60	121.75	2.7122	149	28.406	400.87	365.20	5.1373
80	1189.4	124.22	123.36	2.7326	150	28.164	401.90	365.92	5.1442
81	1184.9	125.85	124.99	2.7528	151	27.928	402.93	366.65	5.1510
82	1180.3	127.49	126.63	2.7730	152	27.696	403.96	367.37	5.1578
83	1175.8	129.14	128.28	2.7930	153	27.469	404.98	368.10	5.1645
84	1171.3	130.80	129.93	2.8129	154	27.246	406.01	368.82	5.1712
85	1166.8	132.47	131.60	2.8327	155	27.027	407.03	369.54	5.1778
86	1162.4	134.13	133.26	2.8521	156	26.813	408.04	370.25	5.1843
87	1157.6	135.82	134.94	2.8716	157	26.602	409.06	370.97	5.1908
88	1152.7	137.52	136.64	2.8910	158	26.395	410.07	371.68	5.1973
89	1147.7	139.22	138.34	2.9103	159	26.192	411.08	372.40	5.2036
90	1142.7	140.94	140.05	2.9294	160	25.993	412.09	373.11	5.2100

• PHASE CHANGE

15.00 ATMOSPHERE ISOBAR

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
					91	1138.8	142.93	141.59	2.9465
					92	1133.8	144.66	143.31	2.9654
					93	1128.6	146.39	145.05	2.9842
					94	1123.5	148.14	146.78	3.0029
					95	1118.3	149.89	148.53	3.0214
					96	1113.1	151.65	150.28	3.0398
					97	1107.8	153.42	152.04	3.0581
					98	1102.5	155.19	153.81	3.0763
					99	1097.1	156.97	155.58	3.0944
					100	1091.7	158.75	157.36	3.1123
					101	1086.2	160.54	159.14	3.1301
					102	1080.7	162.34	160.93	3.1478
					103	1075.2	164.14	162.72	3.1653
					104	1069.5	165.94	164.52	3.1828
					105	1063.9	167.75	166.32	3.2001
					106	1058.2	169.56	168.13	3.2173
					107	1052.4	171.38	169.93	3.2343
					108	1046.6	173.20	171.75	3.2513
					109	1040.7	175.02	173.56	3.2681
					110	1034.8	176.85	175.39	3.2848
					111	1028.8	178.69	177.21	3.3014
					112	1022.7	180.52	179.04	3.3179
					113	1016.5	182.37	180.87	3.3342
					114	1010.3	184.21	182.71	3.3505
					115	1004.0	186.07	184.55	3.3667
					116	997.56	187.92	186.40	3.3828
					117	991.06	189.79	188.25	3.3988
					118	984.46	191.66	190.11	3.4147
					119	977.76	193.53	191.98	3.4305
					120	970.95	195.42	193.86	3.4463
					121	964.01	197.32	195.74	3.4620
					122	956.95	199.22	197.64	3.4777
					123	949.74	201.14	199.54	3.4934
					124	942.39	203.08	201.46	3.5091
					125	934.86	205.03	203.40	3.5247
					126	927.16	206.99	205.35	3.5404
					127	919.26	208.98	207.33	3.5561
55	1304.4	86.923	85.757	2.1702	• 127.273	917.01	209.53	207.87	3.5604
56	1299.7	88.327	87.157	2.1955	• 127.273	58.694	369.09	343.19	4.8141
57	1295.1	89.738	88.564	2.2205	128	58.004	370.08	343.88	4.8219
58	1290.5	91.156	89.979	2.2451	129	57.095	371.44	344.82	4.8324
59	1285.9	92.582	91.400	2.2695	130	56.229	372.77	345.74	4.8427
60	1281.3	94.015	92.829	2.2936					
61	1276.7	95.456	94.266	2.3174	131	55.402	374.09	346.65	4.8528
62	1272.1	96.905	95.710	2.3410	132	54.611	375.39	347.55	4.8627
63	1267.6	98.361	97.162	2.3643	133	53.852	376.67	348.44	4.8724
64	1263.0	99.825	98.622	2.3873	134	53.123	377.93	349.32	4.8819
65	1258.4	101.30	100.09	2.4102	135	52.423	379.19	350.19	4.8912
66	1253.8	102.78	101.57	2.4328	136	51.748	380.43	351.06	4.9003
67	1249.3	104.27	103.05	2.4552	137	51.098	381.65	351.91	4.9093
68	1244.7	105.77	104.55	2.4774	138	50.471	382.87	352.76	4.9182
69	1240.1	107.27	106.05	2.4994	139	49.865	384.08	353.60	4.9269
70	1235.6	108.79	107.56	2.5212	140	49.278	385.27	354.43	4.9355
71	1231.0	110.32	109.08	2.5429	141	48.711	386.46	355.26	4.9439
72	1226.5	111.85	110.61	2.5643	142	48.161	387.64	356.08	4.9522
73	1221.9	113.40	112.16	2.5857	143	47.627	388.81	356.90	4.9604
74	1217.4	114.96	113.71	2.6068	144	47.110	389.97	357.71	4.9685
75	1212.9	116.52	115.27	2.6279	145	46.607	391.12	358.51	4.9765
76	1208.3	118.10	116.84	2.6488	146	46.118	392.27	359.31	4.9844
77	1203.8	119.69	118.42	2.6695	147	45.643	393.41	360.11	4.9922
78	1199.3	121.28	120.02	2.6901	148	45.180	394.54	360.90	4.9999
79	1194.8	122.89	121.62	2.7106	149	44.730	395.67	361.69	5.0074
80	1190.3	124.51	123.23	2.7310	150	44.291	396.79	362.48	5.0149
81	1185.8	126.14	124.86	2.7512	151	43.864	397.91	363.26	5.0224
82	1181.3	127.78	126.49	2.7713	152	43.446	399.02	364.03	5.0297
83	1176.8	129.43	128.14	2.7913	153	43.039	400.12	364.81	5.0369
84	1172.3	131.09	129.79	2.8112	154	42.642	401.22	365.58	5.0441
85	1167.8	132.76	131.46	2.8310	155	42.253	402.32	366.35	5.0512
86	1163.4	134.41	133.10	2.8503	156	41.874	403.41	367.11	5.0582
87	1158.6	136.10	134.78	2.8698	157	41.503	404.49	367.87	5.0651
88	1153.7	137.79	136.47	2.8891	158	41.140	405.58	368.63	5.0720
89	1148.8	139.49	138.17	2.9084	159	40.785	406.65	369.39	5.0788
90	1143.8	141.21	139.88	2.9275	160	40.438	407.73	370.14	5.0855

• PHASE CHANGE

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
161	25.797	413.10	373.82	5.2162	231	17.183	480.74	421.78	5.5658
162	25.604	414.10	374.53	5.2225	232	17.104	481.69	422.45	5.5698
163	25.415	415.11	375.24	5.2286	233	17.025	482.63	423.12	5.5739
164	25.229	416.11	375.95	5.2348	234	16.948	483.58	423.79	5.5779
165	25.046	417.11	376.65	5.2408	235	16.871	484.52	424.46	5.5820
166	24.866	418.11	377.36	5.2469	236	16.795	485.46	425.13	5.5860
167	24.689	419.10	378.06	5.2529	237	16.720	486.40	425.80	5.5899
168	24.514	420.10	378.76	5.2588	238	16.645	487.34	426.47	5.5939
169	24.343	421.09	379.47	5.2647	239	16.571	488.29	427.14	5.5979
170	24.174	422.08	380.17	5.2705	240	16.498	489.23	427.81	5.6018
171	24.008	423.07	380.87	5.2763	241	16.425	490.17	428.48	5.6057
172	23.845	424.06	381.56	5.2821	242	16.353	491.11	429.15	5.6096
173	23.684	425.05	382.26	5.2878	243	16.282	492.05	429.82	5.6135
174	23.525	426.03	382.96	5.2935	244	16.211	492.99	430.49	5.6173
175	23.369	427.02	383.66	5.2991	245	16.141	493.93	431.16	5.6212
176	23.215	428.00	384.35	5.3047	246	16.072	494.87	431.82	5.6250
177	23.063	428.98	385.05	5.3103	247	16.003	495.81	432.49	5.6288
178	22.914	429.96	385.74	5.3158	248	15.935	496.75	433.16	5.6326
179	22.766	430.94	386.43	5.3213	249	15.868	497.69	433.83	5.6364
180	22.621	431.92	387.13	5.3268	250	15.801	498.63	434.50	5.6402
181	22.478	432.89	387.82	5.3322	251	15.735	499.56	435.17	5.6439
182	22.337	433.87	388.51	5.3375	252	15.669	500.50	435.84	5.6476
183	22.198	434.84	389.20	5.3429	253	15.604	501.44	436.50	5.6513
184	22.060	435.82	389.89	5.3482	254	15.539	502.38	437.17	5.6550
185	21.925	436.79	390.58	5.3535	255	15.475	503.32	437.84	5.6587
186	21.791	437.76	391.26	5.3587	256	15.412	504.25	438.51	5.6624
187	21.660	438.73	391.95	5.3639	257	15.349	505.19	439.17	5.6661
188	21.529	439.70	392.64	5.3691	258	15.286	506.13	439.84	5.6697
189	21.401	440.67	393.33	5.3742	259	15.224	507.06	440.51	5.6733
190	21.274	441.64	394.01	5.3793	260	15.163	508.00	441.18	5.6769
191	21.149	442.61	394.70	5.3844	261	15.102	508.94	441.85	5.6805
192	21.026	443.57	395.38	5.3894	262	15.042	509.88	442.51	5.6841
193	20.904	444.54	396.07	5.3945	263	14.982	510.81	443.18	5.6877
194	20.784	445.50	396.75	5.3994	264	14.923	511.75	443.85	5.6912
195	20.665	446.47	397.43	5.4044	265	14.864	512.68	444.51	5.6948
196	20.548	447.43	398.12	5.4093	266	14.805	513.62	445.18	5.6983
197	20.432	448.39	398.80	5.4142	267	14.747	514.56	445.85	5.7018
198	20.317	449.35	399.48	5.4191	268	14.690	515.49	446.52	5.7053
199	20.204	450.31	400.16	5.4239	269	14.633	516.43	447.18	5.7088
200	20.092	451.27	400.84	5.4287	270	14.576	517.36	447.85	5.7123
201	19.982	452.23	401.52	5.4335	271	14.520	518.30	448.52	5.7157
202	19.873	453.19	402.20	5.4383	272	14.465	519.23	449.18	5.7192
203	19.765	454.15	402.88	5.4430	273	14.410	520.17	449.85	5.7226
204	19.658	455.10	403.56	5.4477	274	14.355	521.10	450.52	5.7260
205	19.553	456.06	404.24	5.4524	275	14.301	522.04	451.19	5.7294
206	19.449	457.02	404.92	5.4570	276	14.247	522.97	451.85	5.7328
207	19.346	457.97	405.60	5.4617	277	14.193	523.91	452.52	5.7362
208	19.244	458.93	406.27	5.4663	278	14.140	524.84	453.19	5.7396
209	19.143	459.88	406.95	5.4708	279	14.087	525.78	453.85	5.7429
210	19.044	460.83	407.63	5.4754	280	14.035	526.71	454.52	5.7463
211	18.946	461.79	408.30	5.4799	281	13.983	527.65	455.19	5.7496
212	18.848	462.74	408.98	5.4844	282	13.932	528.58	455.85	5.7529
213	18.752	463.69	409.66	5.4889	283	13.881	529.52	456.52	5.7562
214	18.657	464.64	410.33	5.4934	284	13.830	530.45	457.19	5.7595
215	18.563	465.59	411.01	5.4978	285	13.780	531.39	457.86	5.7628
216	18.470	466.54	411.68	5.5022	286	13.730	532.32	458.52	5.7661
217	18.377	467.49	412.36	5.5066	287	13.680	533.26	459.19	5.7693
218	18.286	468.44	413.03	5.5109	288	13.631	534.19	459.86	5.7726
219	18.196	469.39	413.71	5.5153	289	13.582	535.12	460.52	5.7758
220	18.107	470.34	414.38	5.5196	290	13.534	536.06	461.19	5.7791
221	18.018	471.29	415.05	5.5239	291	13.486	536.99	461.86	5.7823
222	17.931	472.24	415.73	5.5282	292	13.438	537.93	462.53	5.7855
223	17.844	473.18	416.40	5.5324	293	13.391	538.86	463.19	5.7887
224	17.759	474.13	417.07	5.5367	294	13.344	539.80	463.86	5.7919
225	17.674	475.08	417.75	5.5409	295	13.297	540.73	464.53	5.7950
226	17.590	476.02	418.42	5.5451	296	13.251	541.66	465.20	5.7982
227	17.507	476.97	419.09	5.5493	297	13.205	542.60	465.86	5.8013
228	17.425	477.91	419.76	5.5534	298	13.159	543.53	466.53	5.8045
229	17.343	478.86	420.43	5.5576	299	13.113	544.47	467.20	5.8076
230	17.263	479.80	421.10	5.5617	300	13.068	545.40	467.87	5.8107

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
161	40.098	408.80	370.89	5.0922	231	26.009	478.72	420.29	5.4540
162	39.765	409.86	371.64	5.0988	232	25.886	479.69	420.97	5.4581
163	39.439	410.93	372.39	5.1054	233	25.763	480.65	421.65	5.4622
164	39.119	411.99	373.13	5.1118	234	25.642	481.61	422.33	5.4663
165	38.805	413.04	373.88	5.1183	235	25.522	482.56	423.01	5.4704
166	38.498	414.10	374.62	5.1246	236	25.403	483.52	423.69	5.4745
167	38.196	415.15	375.36	5.1309	237	25.286	484.48	424.37	5.4786
168	37.900	416.19	376.09	5.1372	238	25.169	485.44	425.05	5.4826
169	37.610	417.24	376.83	5.1434	239	25.054	486.40	425.73	5.4866
170	37.325	418.28	377.56	5.1495	240	24.940	487.35	426.41	5.4906
171	37.045	419.32	378.29	5.1556	241	24.827	488.31	427.09	5.4946
172	36.770	420.35	379.02	5.1617	242	24.715	489.27	427.77	5.4985
173	36.500	421.39	379.75	5.1677	243	24.604	490.22	428.45	5.5025
174	36.234	422.42	380.47	5.1736	244	24.495	491.18	429.13	5.5064
175	35.973	423.45	381.20	5.1795	245	24.386	492.13	429.80	5.5103
176	35.717	424.48	381.92	5.1853	246	24.278	493.08	430.48	5.5142
177	35.465	425.50	382.64	5.1912	247	24.172	494.04	431.16	5.5180
178	35.217	426.52	383.37	5.1969	248	24.066	494.99	431.84	5.5219
179	34.973	427.54	384.08	5.2026	249	23.961	495.94	432.51	5.5257
180	34.732	428.56	384.80	5.2083	250	23.858	496.90	433.19	5.5296
181	34.496	429.58	385.52	5.2139	251	23.755	497.85	433.87	5.5334
182	34.264	430.59	386.23	5.2195	252	23.653	498.80	434.54	5.5371
183	34.035	431.61	386.95	5.2251	253	23.552	499.75	435.22	5.5409
184	33.809	432.62	387.66	5.2306	254	23.452	500.70	435.90	5.5447
185	33.587	433.62	388.37	5.2360	255	23.353	501.65	436.57	5.5484
186	33.369	434.63	389.08	5.2415	256	23.255	502.60	437.25	5.5521
187	33.153	435.64	389.79	5.2469	257	23.158	503.55	437.92	5.5558
188	32.941	436.64	390.50	5.2522	258	23.061	504.50	438.60	5.5595
189	32.732	437.64	391.21	5.2575	259	22.966	505.45	439.27	5.5632
190	32.526	438.64	391.92	5.2628	260	22.871	506.40	439.95	5.5668
191	32.323	439.64	392.62	5.2681	261	22.777	507.35	440.62	5.5705
192	32.123	440.64	393.33	5.2733	262	22.684	508.30	441.30	5.5741
193	31.925	441.64	394.03	5.2785	263	22.592	509.25	441.97	5.5777
194	31.731	442.63	394.73	5.2836	264	22.500	510.20	442.65	5.5813
195	31.539	443.63	395.44	5.2887	265	22.409	511.14	443.32	5.5849
196	31.349	444.62	396.14	5.2938	266	22.320	512.09	443.99	5.5885
197	31.163	445.61	396.84	5.2988	267	22.230	513.04	444.67	5.5920
198	30.978	446.60	397.54	5.3038	268	22.142	513.98	445.34	5.5956
199	30.797	447.59	398.24	5.3088	269	22.054	514.93	446.02	5.5991
200	30.617	448.58	398.94	5.3138	270	21.967	515.88	446.69	5.6026
201	30.440	449.56	399.63	5.3187	271	21.881	516.82	447.36	5.6061
202	30.265	450.55	400.33	5.3236	272	21.795	517.77	448.04	5.6096
203	30.093	451.53	401.03	5.3284	273	21.711	518.72	448.71	5.6131
204	29.922	452.52	401.72	5.3333	274	21.627	519.66	449.38	5.6165
205	29.754	453.50	402.42	5.3381	275	21.543	520.61	450.06	5.6200
206	29.588	454.48	403.11	5.3428	276	21.460	521.55	450.73	5.6234
207	29.424	455.46	403.80	5.3476	277	21.378	522.50	451.40	5.6268
208	29.262	456.44	404.50	5.3523	278	21.297	523.44	452.08	5.6302
209	29.101	457.41	405.19	5.3570	279	21.216	524.39	452.75	5.6336
210	28.943	458.39	405.88	5.3617	280	21.136	525.33	453.42	5.6370
211	28.787	459.37	406.57	5.3663	281	21.056	526.28	454.10	5.6403
212	28.633	460.34	407.26	5.3709	282	20.977	527.22	454.77	5.6437
213	28.480	461.32	407.95	5.3755	283	20.899	528.17	455.44	5.6470
214	28.329	462.29	408.64	5.3800	284	20.821	529.11	456.11	5.6504
215	28.180	463.26	409.33	5.3846	285	20.744	530.05	456.79	5.6537
216	28.033	464.24	410.02	5.3891	286	20.668	531.00	457.46	5.6570
217	27.887	465.21	410.71	5.3936	287	20.592	531.94	458.13	5.6603
218	27.743	466.18	411.39	5.3980	288	20.517	532.88	458.80	5.6636
219	27.601	467.15	412.08	5.4025	289	20.442	533.83	459.48	5.6668
220	27.460	468.11	412.77	5.4069	290	20.368	534.77	460.15	5.6701
221	27.321	469.08	413.45	5.4113	291	20.294	535.71	460.82	5.6733
222	27.183	470.05	414.14	5.4156	292	20.221	536.66	461.50	5.6766
223	27.047	471.02	414.82	5.4200	293	20.149	537.60	462.17	5.6798
224	26.913	471.98	415.51	5.4243	294	20.077	538.54	462.84	5.6830
225	26.779	472.95	416.19	5.4286	295	20.005	539.49	463.51	5.6862
226	26.648	473.91	416.88	5.4329	296	19.935	540.43	464.19	5.6894
227	26.517	474.88	417.56	5.4371	297	19.864	541.37	464.86	5.6926
228	26.388	475.84	418.24	5.4414	298	19.794	542.31	465.53	5.6958
229	26.261	476.80	418.92	5.4456	299	19.725	543.26	466.20	5.6989
230	26.134	477.76	419.61	5.4498	300	19.656	544.20	466.88	5.7021

20.00 ATMOSPHERE ISOBAR

TEMPER- ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER- ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
					91	1140.0	143.19	141.41	2.9445
					92	1134.9	144.92	143.13	2.9634
					93	1129.8	146.65	144.86	2.9822
					94	1124.7	148.39	146.59	3.0008
					95	1119.6	150.14	148.33	3.0193
					96	1114.4	151.90	150.08	3.0377
					97	1109.1	153.66	151.83	3.0559
					98	1103.8	155.43	153.59	3.0741
					99	1098.5	157.20	155.36	3.0921
					100	1093.1	158.99	157.13	3.1100
					101	1087.7	160.77	158.91	3.1278
					102	1082.2	162.56	160.69	3.1454
					103	1076.7	164.36	162.47	3.1629
					104	1071.2	166.16	164.26	3.1803
					105	1065.5	167.96	166.06	3.1976
					106	1059.9	169.77	167.85	3.2147
					107	1054.2	171.58	169.66	3.2317
					108	1048.4	173.39	171.46	3.2486
					109	1042.6	175.21	173.27	3.2654
					110	1036.7	177.03	175.08	3.2820
					111	1030.7	178.86	176.89	3.2985
					112	1024.7	180.69	178.71	3.3149
					113	1018.6	182.52	180.53	3.3312
					114	1012.5	184.36	182.36	3.3474
					115	1006.3	186.21	184.19	3.3635
					116	999.94	188.05	186.03	3.3795
					117	993.53	189.91	187.87	3.3954
					118	987.04	191.76	189.71	3.4112
					119	980.44	193.63	191.56	3.4270
					120	973.74	195.50	193.42	3.4427
					121	966.92	197.39	195.29	3.4583
					122	959.99	199.28	197.17	3.4738
					123	952.93	201.18	199.05	3.4894
					124	945.72	203.09	200.95	3.5049
55	1304.9	87.235	85.682	2.1688	125	938.37	205.02	202.86	3.5204
56	1300.3	88.639	87.080	2.1941	126	930.85	206.97	204.79	3.5359
57	1295.7	90.050	88.486	2.2191	127	923.15	208.93	206.74	3.5514
58	1291.1	91.468	89.898	2.2437	128	915.26	210.92	208.71	3.5670
59	1286.5	92.893	91.318	2.2681	129	907.16	212.93	210.70	3.5826
60	1281.9	94.326	92.745	2.2922	130	898.81	214.97	212.71	3.5984
61	1277.3	95.766	94.180	2.3160	131	890.21	217.04	214.76	3.6142
62	1272.8	97.214	95.622	2.3395	132	881.31	219.14	216.84	3.6302
63	1268.2	98.670	97.072	2.3628	133	872.09	221.29	218.97	3.6465
64	1263.6	100.13	98.530	2.3859	• 133.063	871.49	221.43	219.10	3.6475
65	1259.1	101.61	99.996	2.4087	• 133.063	79.886	367.88	342.52	4.7481
66	1254.5	103.09	101.47	2.4313	134	78.467	369.36	343.54	4.7592
67	1250.0	104.57	102.95	2.4537	135	77.043	370.91	344.60	4.7707
68	1245.4	106.07	104.45	2.4759	136	75.702	372.41	345.64	4.7818
69	1240.9	107.58	105.95	2.4979	137	74.436	373.89	346.66	4.7926
70	1236.3	109.10	107.46	2.5197	138	73.237	375.34	347.67	4.8031
					139	72.097	376.76	348.65	4.8134
					140	71.012	378.15	349.62	4.8234
71	1231.8	110.62	108.98	2.5413	141	69.976	379.53	350.57	4.8332
72	1227.3	112.16	110.51	2.5628	142	68.986	380.89	351.51	4.8428
73	1222.7	113.70	112.04	2.5841	143	68.037	382.22	352.44	4.8522
74	1218.2	115.26	113.59	2.6053	144	67.127	383.54	353.35	4.8614
75	1213.7	116.82	115.15	2.6263	145	66.252	384.85	354.26	4.8704
76	1209.2	118.40	116.72	2.6472	146	65.410	386.14	355.16	4.8793
77	1204.7	119.99	118.30	2.6679	147	64.599	387.41	356.04	4.8880
78	1200.2	121.58	119.89	2.6885	148	63.816	388.68	356.92	4.8965
79	1195.7	123.19	121.50	2.7090	149	63.060	389.93	357.79	4.9050
80	1191.2	124.81	123.11	2.7294	150	62.330	391.17	358.66	4.9133
81	1186.7	126.44	124.73	2.7496	151	61.622	392.40	359.51	4.9214
82	1182.2	128.08	126.36	2.7697	152	60.937	393.62	360.36	4.9295
83	1177.7	129.72	128.00	2.7897	153	60.273	394.82	361.20	4.9374
84	1173.2	131.38	129.66	2.8096	154	59.628	396.03	362.04	4.9452
85	1168.7	133.05	131.32	2.8293	155	59.002	397.22	362.87	4.9529
86	1164.5	134.69	132.95	2.8485	156	58.394	398.40	363.70	4.9605
87	1159.7	136.37	134.63	2.8679	157	57.803	399.58	364.52	4.9681
88	1154.8	138.06	136.31	2.8873	158	57.227	400.74	365.33	4.9755
89	1149.9	139.77	138.00	2.9065	159	56.667	401.90	366.14	4.9828
90	1145.0	141.47	139.70	2.9256	160	56.121	403.06	366.95	4.9900

* PHASE CHANGE

25.00 ATMOSPHERE ISOBAR

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
					91	1141.1	143.46	141.24	2.9426
					92	1136.1	145.18	142.95	2.9614
					93	1131.0	146.91	144.67	2.9801
					94	1125.9	148.65	146.40	2.9987
					95	1120.8	150.40	148.14	3.0172
					96	1115.6	152.15	149.88	3.0356
					97	1110.4	153.91	151.63	3.0538
					98	1105.2	155.67	153.38	3.0719
					99	1099.9	157.44	155.14	3.0899
					100	1094.5	159.22	156.91	3.1077
					101	1089.2	161.00	158.68	3.1254
					102	1083.7	162.79	160.45	3.1430
					103	1078.3	164.58	162.23	3.1605
					104	1072.7	166.37	164.01	3.1778
					105	1067.2	168.17	165.80	3.1951
					106	1061.6	169.97	167.59	3.2121
					107	1055.9	171.78	169.38	3.2291
					108	1050.2	173.59	171.18	3.2459
					109	1044.4	175.40	172.98	3.2626
					110	1038.6	177.22	174.78	3.2792
					111	1032.7	179.04	176.58	3.2957
					112	1026.8	180.86	178.39	3.3120
					113	1020.7	182.69	180.20	3.3283
					114	1014.7	184.52	182.02	3.3444
					115	1008.5	186.35	183.84	3.3604
					116	1002.3	188.19	185.66	3.3763
					117	995.95	190.03	187.49	3.3921
					118	989.54	191.88	189.32	3.4079
					119	983.05	193.73	191.16	3.4235
					120	976.45	195.59	193.00	3.4391
					121	969.75	197.46	194.85	3.4546
					122	962.94	199.34	196.71	3.4700
					123	956.01	201.23	198.58	3.4855
					124	948.95	203.12	200.46	3.5008
55	1305.4	87.548	85.608	2.1675	125	941.75	205.04	202.35	3.5162
56	1300.8	88.951	87.004	2.1927	126	934.40	206.96	204.25	3.5315
57	1296.2	90.362	88.408	2.2177	127	926.89	208.90	206.17	3.5469
58	1291.7	91.779	89.818	2.2424	128	919.20	210.86	208.11	3.5622
59	1287.1	93.204	91.236	2.2667	129	911.32	212.85	210.07	3.5777
60	1282.5	94.636	92.661	2.2908	130	903.23	214.85	212.05	3.5932
					131	894.90	216.89	214.06	3.6088
61	1278.0	96.076	94.094	2.3146	132	886.32	218.96	216.10	3.6245
62	1273.4	97.523	95.534	2.3381	133	877.45	221.06	218.17	3.6404
63	1268.8	98.979	96.982	2.3614	134	868.25	223.21	220.29	3.6564
64	1264.3	100.44	98.438	2.3844	135	858.69	225.40	222.45	3.6728
65	1259.7	101.91	99.902	2.4072	136	848.71	227.66	224.67	3.6894
66	1255.2	103.39	101.37	2.4298	137	838.25	229.98	226.96	3.7064
67	1250.7	104.88	102.86	2.4522	• 137.879	828.60	232.09	229.03	3.7217
68	1246.1	106.38	104.35	2.4744	• 137.879	103.06	365.57	340.99	4.6898
69	1241.6	107.88	105.84	2.4964	138	102.76	365.80	341.14	4.6915
70	1237.1	109.40	107.35	2.5182	139	100.43	367.64	342.42	4.7048
					140	98.291	369.42	343.65	4.7176
71	1232.6	110.93	108.87	2.5398	141	96.307	371.14	344.84	4.7298
72	1228.0	112.46	110.40	2.5613	142	94.460	372.80	345.99	4.7416
73	1223.5	114.00	111.93	2.5826	143	92.730	374.43	347.11	4.7530
74	1219.0	115.56	113.48	2.6038	144	91.105	376.01	348.20	4.7640
75	1214.5	117.12	115.04	2.6248	145	89.573	377.55	349.27	4.7747
76	1210.0	118.70	116.61	2.6456	146	88.122	379.06	350.32	4.7851
77	1205.5	120.29	118.18	2.6664	147	86.746	380.55	351.35	4.7952
78	1201.0	121.88	119.77	2.6870	148	85.437	382.01	352.36	4.8051
79	1196.5	123.49	121.37	2.7074	149	84.190	383.44	353.35	4.8147
80	1192.0	125.11	122.98	2.7278	150	82.997	384.85	354.33	4.8242
81	1187.6	126.73	124.60	2.7480	151	81.856	386.24	355.29	4.8334
82	1183.1	128.37	126.23	2.7681	152	80.762	387.61	356.24	4.8424
83	1178.6	130.02	127.87	2.7881	153	79.711	388.96	357.18	4.8513
84	1174.2	131.68	129.52	2.8079	154	78.701	390.30	358.11	4.8600
85	1169.7	133.35	131.18	2.8277	155	77.727	391.62	359.03	4.8686
86	1165.5	134.97	132.80	2.8467	156	76.789	392.92	359.93	4.8770
87	1160.7	136.65	134.47	2.8661	157	75.883	394.21	360.83	4.8852
88	1155.9	138.34	136.15	2.8854	158	75.008	395.49	361.72	4.8933
89	1151.0	140.04	137.84	2.9046	159	74.161	396.76	362.61	4.9013
90	1146.1	141.74	139.53	2.9237	160	73.341	398.02	363.48	4.9092

• PHASE CHANGE

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
161	55.589	404.21	367.75	4.9972	231	34.998	476.69	418.78	5.3727
162	55.070	405.35	368.55	5.0043	232	34.826	477.66	419.47	5.3769
163	54.564	406.48	369.34	5.0112	233	34.655	478.64	420.17	5.3811
164	54.070	407.61	370.13	5.0182	234	34.487	479.62	420.86	5.3853
165	53.587	408.74	370.92	5.0250	235	34.321	480.60	421.55	5.3894
166	53.115	409.86	371.71	5.0318	236	34.156	481.57	422.24	5.3936
167	52.654	410.97	372.49	5.0384	237	33.993	482.55	422.93	5.3977
168	52.203	412.08	373.26	5.0451	238	33.832	483.52	423.62	5.4018
169	51.762	413.19	374.04	5.0516	239	33.672	484.49	424.31	5.4059
170	51.330	414.29	374.81	5.0581	240	33.514	485.47	425.00	5.4100
171	50.907	415.38	375.58	5.0646	241	33.358	486.44	425.69	5.4140
172	50.493	416.48	376.34	5.0709	242	33.203	487.41	426.38	5.4180
173	50.087	417.56	377.10	5.0772	243	33.050	488.38	427.06	5.4220
174	49.690	418.65	377.87	5.0835	244	32.898	489.35	427.75	5.4260
175	49.300	419.73	378.62	5.0897	245	32.748	490.32	428.44	5.4300
176	48.918	420.81	379.38	5.0958	246	32.600	491.29	429.13	5.4339
177	48.543	421.88	380.13	5.1019	247	32.453	492.26	429.81	5.4378
178	48.175	422.95	380.88	5.1079	248	32.307	493.23	430.50	5.4418
179	47.814	424.02	381.63	5.1139	249	32.163	494.19	431.18	5.4457
180	47.459	425.08	382.38	5.1198	250	32.020	495.16	431.87	5.4495
181	47.111	426.14	383.13	5.1257	251	31.878	496.13	432.56	5.4534
182	46.769	427.20	383.87	5.1315	252	31.738	497.09	433.24	5.4572
183	46.433	428.25	384.61	5.1373	253	31.599	498.06	433.92	5.4610
184	46.103	429.31	385.35	5.1430	254	31.462	499.02	434.61	5.4648
185	45.778	430.36	386.09	5.1487	255	31.326	499.98	435.29	5.4686
186	45.459	431.40	386.82	5.1544	256	31.191	500.95	435.98	5.4724
187	45.146	432.45	387.56	5.1600	257	31.057	501.91	436.66	5.4762
188	44.837	433.49	388.29	5.1655	258	30.925	502.87	437.34	5.4799
189	44.533	434.53	389.02	5.1710	259	30.794	503.84	438.03	5.4836
190	44.235	435.57	389.75	5.1765	260	30.664	504.80	438.71	5.4873
191	43.941	436.60	390.48	5.1820	261	30.535	505.76	439.39	5.4910
192	43.651	437.63	391.21	5.1873	262	30.407	506.72	440.07	5.4947
193	43.367	438.66	391.93	5.1927	263	30.281	507.68	440.75	5.4983
194	43.086	439.69	392.66	5.1980	264	30.155	508.64	441.44	5.5020
195	42.810	440.72	393.38	5.2033	265	30.031	509.60	442.12	5.5056
196	42.538	441.74	394.10	5.2085	266	29.908	510.56	442.80	5.5092
197	42.270	442.77	394.82	5.2137	267	29.786	511.52	443.48	5.5128
198	42.006	443.79	395.54	5.2189	268	29.665	512.48	444.16	5.5164
199	41.745	444.81	396.26	5.2240	269	29.545	513.43	444.84	5.5200
200	41.489	445.82	396.98	5.2291	270	29.426	514.39	445.52	5.5235
201	41.236	446.84	397.70	5.2342	271	29.308	515.35	446.20	5.5271
202	40.987	447.85	398.41	5.2392	272	29.191	516.31	446.88	5.5306
203	40.741	448.87	399.12	5.2442	273	29.075	517.26	447.56	5.5341
204	40.498	449.88	399.84	5.2492	274	28.960	518.22	448.24	5.5376
205	40.259	450.89	400.55	5.2541	275	28.846	519.17	448.92	5.5411
206	40.023	451.89	401.26	5.2590	276	28.733	520.13	449.60	5.5446
207	39.790	452.90	401.97	5.2639	277	28.621	521.09	450.28	5.5480
208	39.561	453.90	402.68	5.2688	278	28.510	522.04	450.96	5.5515
209	39.334	454.91	403.39	5.2736	279	28.400	523.00	451.64	5.5549
210	39.110	455.91	404.10	5.2784	280	28.291	523.95	452.32	5.5583
211	38.890	456.91	404.80	5.2831	281	28.182	524.91	453.00	5.5617
212	38.672	457.91	405.51	5.2878	282	28.075	525.86	453.68	5.5651
213	38.457	458.91	406.21	5.2925	283	27.968	526.81	454.36	5.5685
214	38.244	459.90	406.92	5.2972	284	27.862	527.77	455.03	5.5718
215	38.034	460.90	407.62	5.3018	285	27.757	528.72	455.71	5.5752
216	37.827	461.89	408.32	5.3065	286	27.653	529.67	456.39	5.5785
217	37.622	462.89	409.02	5.3110	287	27.550	530.63	457.07	5.5818
218	37.420	463.88	409.73	5.3156	288	27.448	531.58	457.75	5.5852
219	37.220	464.87	410.43	5.3201	289	27.346	532.53	458.43	5.5885
220	37.023	465.86	411.13	5.3247	290	27.245	533.48	459.10	5.5918
221	36.828	466.85	411.82	5.3291	291	27.145	534.44	459.78	5.5950
222	36.635	467.84	412.52	5.3336	292	27.046	535.39	460.46	5.5983
223	36.445	468.83	413.22	5.3380	293	26.947	536.34	461.14	5.6016
224	36.257	469.81	413.92	5.3424	294	26.850	537.29	461.82	5.6048
225	36.071	470.80	414.61	5.3468	295	26.753	538.24	462.49	5.6080
226	35.887	471.78	415.31	5.3512	296	26.656	539.20	463.17	5.6112
227	35.705	472.76	416.01	5.3555	297	26.561	540.15	463.85	5.6145
228	35.525	473.74	416.70	5.3599	298	26.466	541.10	464.53	5.6177
229	35.347	474.73	417.40	5.3641	299	26.372	542.05	465.21	5.6208
230	35.171	475.71	418.09	5.3684	300	26.278	543.00	465.88	5.6240

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
161	72.546	399.26	364.35	4.9170	231	44.151	474.63	417.26	5.3081
162	71.775	400.50	365.21	4.9246	232	43.926	475.63	417.96	5.3124
163	71.027	401.73	366.06	4.9322	233	43.705	476.62	418.66	5.3167
164	70.300	402.94	366.91	4.9396	234	43.486	477.62	419.37	5.3209
165	69.594	404.15	367.75	4.9470	235	43.269	478.61	420.07	5.3252
166	68.907	405.35	368.59	4.9542	236	43.055	479.61	420.77	5.3294
167	68.238	406.54	369.42	4.9614	237	42.843	480.60	421.47	5.3336
168	67.586	407.73	370.25	4.9684	238	42.633	481.59	422.17	5.3378
169	66.951	408.91	371.07	4.9754	239	42.426	482.58	422.87	5.3419
170	66.332	410.08	371.89	4.9823	240	42.221	483.57	423.57	5.3460
171	65.728	411.24	372.70	4.9892	241	42.019	484.56	424.27	5.3501
172	65.138	412.40	373.51	4.9959	242	41.818	485.54	424.97	5.3542
173	64.562	413.55	374.31	5.0026	243	41.620	486.53	425.67	5.3583
174	64.000	414.70	375.12	5.0092	244	41.423	487.52	426.36	5.3624
175	63.450	415.84	375.91	5.0157	245	41.229	488.50	427.06	5.3664
176	62.913	416.97	376.71	5.0222	246	41.037	489.49	427.76	5.3704
177	62.387	418.10	377.50	5.0286	247	40.846	490.47	428.45	5.3744
178	61.872	419.23	378.28	5.0349	248	40.658	491.45	429.15	5.3784
179	61.368	420.35	379.07	5.0412	249	40.472	492.43	429.84	5.3823
180	60.875	421.46	379.85	5.0474	250	40.287	493.41	430.54	5.3862
181	60.392	422.57	380.63	5.0536	251	40.105	494.40	431.23	5.3901
182	59.918	423.68	381.40	5.0597	252	39.924	495.37	431.93	5.3940
183	59.454	424.78	382.18	5.0657	253	39.745	496.35	432.62	5.3979
184	58.999	425.88	382.95	5.0717	254	39.568	497.33	433.31	5.4018
185	58.552	426.98	383.71	5.0776	255	39.392	498.31	434.00	5.4056
186	58.114	428.07	384.48	5.0835	256	39.218	499.29	434.70	5.4094
187	57.684	429.15	385.24	5.0894	257	39.046	500.26	435.39	5.4133
188	57.262	430.24	386.00	5.0951	258	38.876	501.24	436.08	5.4170
189	56.847	431.32	386.76	5.1009	259	38.707	502.21	436.77	5.4208
190	56.440	432.40	387.52	5.1066	260	38.540	503.19	437.46	5.4246
191	56.040	433.47	388.27	5.1122	261	38.374	504.16	438.15	5.4283
192	55.647	434.54	389.02	5.1178	262	38.210	505.14	438.84	5.4320
193	55.261	435.61	389.77	5.1233	263	38.048	506.11	439.53	5.4357
194	54.881	436.68	390.52	5.1289	264	37.887	507.08	440.22	5.4394
195	54.508	437.74	391.27	5.1343	265	37.727	508.05	440.91	5.4431
196	54.141	438.80	392.01	5.1397	266	37.569	509.02	441.60	5.4468
197	53.779	439.86	392.75	5.1451	267	37.413	509.99	442.29	5.4504
198	53.424	440.91	393.49	5.1505	268	37.257	510.96	442.97	5.4540
199	53.074	441.96	394.23	5.1558	269	37.104	511.93	443.66	5.4576
200	52.730	443.01	394.97	5.1610	270	36.951	512.90	444.35	5.4612
201	52.391	444.06	395.71	5.1662	271	36.800	513.87	445.04	5.4648
202	52.057	445.10	396.44	5.1714	272	36.650	514.84	445.72	5.4684
203	51.728	446.15	397.18	5.1766	273	36.502	515.81	446.41	5.4719
204	51.404	447.19	397.91	5.1817	274	36.355	516.77	447.10	5.4755
205	51.085	448.23	398.64	5.1868	275	36.209	517.74	447.78	5.4790
206	50.771	449.26	399.37	5.1918	276	36.065	518.71	448.47	5.4825
207	50.461	450.30	400.10	5.1968	277	35.921	519.67	449.15	5.4860
208	50.156	451.33	400.82	5.2018	278	35.779	520.64	449.84	5.4895
209	49.855	452.36	401.55	5.2067	279	35.638	521.60	450.53	5.4929
210	49.558	453.39	402.27	5.2116	280	35.499	522.57	451.21	5.4964
211	49.265	454.41	403.00	5.2165	281	35.360	523.53	451.90	5.4998
212	48.977	455.44	403.72	5.2214	282	35.223	524.50	452.58	5.5032
213	48.692	456.46	404.44	5.2262	283	35.087	525.46	453.27	5.5067
214	48.411	457.48	405.16	5.2310	284	34.952	526.43	453.95	5.5101
215	48.134	458.50	405.88	5.2357	285	34.818	527.39	454.64	5.5134
216	47.861	459.52	406.60	5.2405	286	34.685	528.35	455.32	5.5168
217	47.591	460.54	407.31	5.2451	287	34.554	529.31	456.00	5.5202
218	47.325	461.55	408.03	5.2498	288	34.423	530.28	456.69	5.5235
219	47.062	462.57	408.74	5.2545	289	34.293	531.24	457.37	5.5269
220	46.802	463.58	409.46	5.2591	290	34.165	532.20	458.06	5.5302
221	46.546	464.59	410.17	5.2637	291	34.037	533.16	458.74	5.5335
222	46.293	465.60	410.88	5.2682	292	33.911	534.12	459.42	5.5368
223	46.043	466.61	411.59	5.2727	293	33.785	535.08	460.11	5.5401
224	45.797	467.62	412.30	5.2772	294	33.661	536.04	460.79	5.5433
225	45.553	468.62	413.01	5.2817	295	33.537	537.00	461.47	5.5466
226	45.312	469.63	413.72	5.2862	296	33.415	537.96	462.16	5.5499
227	45.074	470.63	414.43	5.2906	297	33.293	538.92	462.84	5.5531
228	44.839	471.63	415.14	5.2950	298	33.173	539.88	463.52	5.5563
229	44.607	472.63	415.84	5.2994	299	33.053	540.84	464.20	5.5595
230	44.377	473.63	416.55	5.3037	300	32.934	541.80	464.89	5.5627

30.00 ATMOSPHERE ISOBAR

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
					91	1142.2	143.73	141.07	2.9407
					92	1137.2	145.45	142.77	2.9595
					93	1132.2	147.17	144.49	2.9781
					94	1127.2	148.91	146.21	2.9967
					95	1122.1	150.65	147.94	3.0151
					96	1116.9	152.40	149.68	3.0335
					97	1111.7	154.16	151.42	3.0516
					98	1106.5	155.92	153.17	3.0697
					99	1101.2	157.69	154.92	3.0877
					100	1095.9	159.46	156.68	3.1055
					101	1090.6	161.23	158.45	3.1231
					102	1085.2	163.02	160.22	3.1407
					103	1079.8	164.80	161.99	3.1581
					104	1074.3	166.59	163.76	3.1754
					105	1068.8	168.39	165.54	3.1926
					106	1063.2	170.18	167.32	3.2096
					107	1057.6	171.98	169.11	3.2265
					108	1052.0	173.79	170.90	3.2433
					109	1046.2	175.59	172.69	3.2600
					110	1040.5	177.40	174.48	3.2765
					111	1034.6	179.22	176.28	3.2929
					112	1028.8	181.03	178.08	3.3092
					113	1022.8	182.85	179.88	3.3253
					114	1016.8	184.67	181.68	3.3414
					115	1010.7	186.50	183.49	3.3573
					116	1004.5	188.33	185.30	3.3732
					117	998.31	190.16	187.12	3.3889
					118	992.00	192.00	188.94	3.4046
					119	985.59	193.84	190.76	3.4201
					120	979.10	195.69	192.59	3.4356
					121	972.51	197.55	194.42	3.4510
					122	965.81	199.41	196.27	3.4663
					123	959.00	201.29	198.12	3.4816
					124	952.07	203.17	199.97	3.4969
55	1305.9	87.862	85.534	2.1661	125	945.02	205.06	201.84	3.5121
56	1301.4	89.264	86.928	2.1914	126	937.83	206.97	203.73	3.5273
57	1296.8	90.674	88.330	2.2163	127	930.48	208.89	205.62	3.5425
58	1292.2	92.091	89.739	2.2410	128	922.98	210.83	207.53	3.5577
59	1287.7	93.515	91.155	2.2653	129	915.31	212.78	209.46	3.5729
60	1283.1	94.947	92.578	2.2894	130	907.44	214.76	211.41	3.5882
61	1278.6	96.386	94.009	2.3132	131	899.36	216.77	213.39	3.6035
62	1274.0	97.833	95.447	2.3367	132	891.06	218.80	215.39	3.6190
63	1269.5	99.288	96.893	2.3600	133	882.50	220.86	217.42	3.6346
64	1265.0	100.75	98.347	2.3830	134	873.66	222.97	219.49	3.6503
65	1260.4	102.22	99.809	2.4058	135	864.50	225.11	221.60	3.6663
66	1255.9	103.70	101.28	2.4284	136	854.99	227.31	223.75	3.6825
67	1251.4	105.19	102.76	2.4508	137	845.07	229.56	225.96	3.6990
68	1246.8	106.68	104.25	2.4729	138	834.68	231.88	228.24	3.7158
69	1242.3	108.19	105.74	2.4949	139	823.75	234.28	230.59	3.7332
70	1237.8	109.70	107.25	2.5167	140	812.18	236.77	233.03	3.7510
					141	799.83	239.30	235.50	3.7691
71	1233.3	111.23	108.76	2.5383	142	786.52	241.98	238.11	3.7879
72	1228.8	112.76	110.29	2.5598	• 142.030	786.10	242.06	238.19	3.7885
73	1224.3	114.31	111.82	2.5811	• 142.030	129.00	362.22	338.65	4.6345
74	1219.8	115.86	113.37	2.6022	143	125.44	364.40	340.17	4.6498
75	1215.3	117.43	114.92	2.6232	144	122.16	366.52	341.64	4.6646
76	1210.8	119.00	116.49	2.6441	145	119.20	368.53	343.03	4.6785
77	1206.4	120.59	118.07	2.6648	146	116.50	370.46	344.37	4.6918
78	1201.9	122.18	119.65	2.6854	147	114.02	372.31	345.65	4.7044
79	1197.4	123.79	121.25	2.7058	148	111.72	374.09	346.89	4.7165
80	1192.9	125.40	122.85	2.7262	149	109.58	375.83	348.08	4.7282
					150	107.58	377.51	349.25	4.7394
81	1188.5	127.03	124.47	2.7464	151	105.70	379.14	350.39	4.7503
82	1184.0	128.67	126.10	2.7665	152	103.92	380.74	351.49	4.7609
83	1179.6	130.31	127.74	2.7864	153	102.25	382.31	352.58	4.7711
84	1175.1	131.97	129.38	2.8063	154	100.65	383.84	353.64	4.7811
85	1170.7	133.64	131.04	2.8260	155	99.141	385.35	354.69	4.7908
86	1166.5	135.26	132.65	2.8449	156	97.699	386.82	355.71	4.8004
87	1161.7	136.93	134.32	2.8643	157	96.322	388.28	356.72	4.8096
88	1156.9	138.62	135.99	2.8836	158	95.004	389.71	357.71	4.8187
89	1152.1	140.31	137.67	2.9027	159	93.740	391.12	358.69	4.8276
90	1147.2	142.01	139.37	2.9218	160	92.527	392.51	359.66	4.8364

• PHASE CHANGE

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
161	91.361	393.89	360.61	4.8449	231	53.471	472.56	415.71	5.2540
162	90.238	395.24	361.56	4.8533	232	53.191	473.57	416.43	5.2584
163	89.156	396.58	362.49	4.8616	233	52.914	474.59	417.14	5.2628
164	88.111	397.91	363.41	4.8697	234	52.640	475.60	417.86	5.2671
165	87.101	399.22	364.33	4.8777	235	52.369	476.62	418.57	5.2714
166	86.125	400.52	365.23	4.8855	236	52.102	477.63	419.28	5.2757
167	85.180	401.81	366.13	4.8933	237	51.837	478.64	420.00	5.2800
168	84.264	403.09	367.02	4.9009	238	51.576	479.65	420.71	5.2843
169	83.375	404.36	367.90	4.9084	239	51.318	480.65	421.42	5.2885
170	82.513	405.61	368.77	4.9158	240	51.063	481.66	422.13	5.2927
171	81.676	406.86	369.64	4.9231	241	50.810	482.66	422.84	5.2969
172	80.862	408.09	370.50	4.9303	242	50.561	483.67	423.55	5.3010
173	80.070	409.32	371.36	4.9374	243	50.314	484.67	424.26	5.3052
174	79.299	410.54	372.20	4.9445	244	50.070	485.67	424.96	5.3093
175	78.549	411.75	373.05	4.9514	245	49.828	486.67	425.67	5.3134
176	77.817	412.95	373.89	4.9582	246	49.590	487.67	426.38	5.3174
177	77.104	414.15	374.72	4.9650	247	49.354	488.67	427.08	5.3215
178	76.409	415.33	375.55	4.9717	248	49.120	489.67	427.79	5.3255
179	75.730	416.52	376.38	4.9783	249	48.889	490.67	428.49	5.3295
180	75.067	417.69	377.20	4.9849	250	48.660	491.66	429.20	5.3335
181	74.420	418.86	378.01	4.9914	251	48.434	492.66	429.90	5.3375
182	73.787	420.02	378.83	4.9978	252	48.210	493.65	430.60	5.3414
183	73.168	421.18	379.63	5.0041	253	47.989	494.65	431.30	5.3454
184	72.563	422.33	380.44	5.0104	254	47.769	495.64	432.01	5.3493
185	71.970	423.48	381.24	5.0166	255	47.552	496.63	432.71	5.3532
186	71.391	424.62	382.04	5.0227	256	47.338	497.62	433.41	5.3571
187	70.823	425.75	382.83	5.0288	257	47.125	498.61	434.11	5.3609
188	70.267	426.88	383.62	5.0349	258	46.914	499.60	434.81	5.3648
189	69.722	428.01	384.41	5.0408	259	46.706	500.59	435.51	5.3686
190	69.187	429.13	385.20	5.0468	260	46.500	501.58	436.20	5.3724
191	68.664	430.25	385.98	5.0526	261	46.295	502.56	436.90	5.3762
192	68.150	431.36	386.76	5.0584	262	46.093	503.55	437.60	5.3800
193	67.646	432.47	387.54	5.0642	263	45.893	504.53	438.30	5.3837
194	67.151	433.58	388.31	5.0699	264	45.694	505.52	438.99	5.3874
195	66.665	434.68	389.08	5.0756	265	45.498	506.50	439.69	5.3912
196	66.188	435.78	389.85	5.0812	266	45.303	507.49	440.39	5.3949
197	65.720	436.87	390.62	5.0868	267	45.110	508.47	441.08	5.3986
198	65.260	437.96	391.38	5.0923	268	44.919	509.45	441.78	5.4022
199	64.808	439.05	392.15	5.0978	269	44.730	510.43	442.47	5.4059
200	64.363	440.14	392.91	5.1032	270	44.543	511.41	443.17	5.4095
201	63.926	441.22	393.67	5.1086	271	44.357	512.39	443.86	5.4131
202	63.497	442.30	394.42	5.1140	272	44.173	513.37	444.56	5.4168
203	63.074	443.37	395.18	5.1193	273	43.991	514.35	445.25	5.4203
204	62.658	444.44	395.93	5.1245	274	43.810	515.33	445.94	5.4239
205	62.249	445.51	396.68	5.1298	275	43.631	516.31	446.64	5.4275
206	61.847	446.58	397.43	5.1350	276	43.453	517.28	447.33	5.4310
207	61.450	447.65	398.18	5.1401	277	43.278	518.26	448.02	5.4346
208	61.060	448.71	398.93	5.1452	278	43.103	519.24	448.71	5.4381
209	60.676	449.77	399.67	5.1503	279	42.930	520.21	449.41	5.4416
210	60.298	450.82	400.41	5.1554	280	42.759	521.19	450.10	5.4451
211	59.925	451.88	401.15	5.1604	281	42.589	522.16	450.79	5.4486
212	59.558	452.93	401.89	5.1653	282	42.421	523.14	451.48	5.4520
213	59.196	453.98	402.63	5.1703	283	42.254	524.11	452.17	5.4555
214	58.840	455.03	403.37	5.1752	284	42.089	525.08	452.86	5.4589
215	58.489	456.07	404.10	5.1801	285	41.925	526.06	453.55	5.4623
216	58.142	457.12	404.84	5.1849	286	41.762	527.03	454.24	5.4657
217	57.801	458.16	405.57	5.1897	287	41.601	528.00	454.93	5.4691
218	57.464	459.20	406.30	5.1945	288	41.441	528.97	455.62	5.4725
219	57.132	460.24	407.03	5.1993	289	41.283	529.95	456.31	5.4759
220	56.804	461.27	407.76	5.2040	290	41.125	530.92	457.00	5.4792
221	56.481	462.31	408.49	5.2087	291	40.970	531.89	457.69	5.4826
222	56.162	463.34	409.22	5.2133	292	40.815	532.86	458.38	5.4859
223	55.847	464.37	409.94	5.2180	293	40.662	533.83	459.07	5.4892
224	55.537	465.40	410.67	5.2226	294	40.509	534.80	459.76	5.4925
225	55.230	466.43	411.39	5.2271	295	40.359	535.77	460.45	5.4958
226	54.928	467.45	412.11	5.2317	296	40.209	536.73	461.14	5.4991
227	54.629	468.48	412.83	5.2362	297	40.060	537.70	461.82	5.5023
228	54.334	469.50	413.55	5.2407	298	39.913	538.67	462.51	5.5056
229	54.043	470.52	414.27	5.2452	299	39.767	539.64	463.20	5.5088
230	53.755	471.54	414.99	5.2496	300	39.622	540.61	463.89	5.5121

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
					91	1143.3	144.00	140.89	2.9387
					92	1138.4	145.71	142.60	2.9575
					93	1133.4	147.44	144.31	2.9762
					94	1128.4	149.17	146.03	2.9947
					95	1123.3	150.91	147.75	3.0131
					96	1118.2	152.65	149.48	3.0314
					97	1113.0	154.41	151.22	3.0495
					98	1107.8	156.16	152.96	3.0676
					99	1102.6	157.93	154.71	3.0855
					100	1097.3	159.70	156.46	3.1032
					101	1092.0	161.47	158.22	3.1209
					102	1086.7	163.25	159.98	3.1384
					103	1081.3	165.03	161.75	3.1558
					104	1075.9	166.81	163.52	3.1730
					105	1070.4	168.60	165.29	3.1901
					106	1064.9	170.40	167.07	3.2071
					107	1059.3	172.19	168.84	3.2240
					108	1053.7	173.99	170.62	3.2407
					109	1048.0	175.79	172.41	3.2573
					110	1042.3	177.59	174.19	3.2738
					111	1036.5	179.40	175.98	3.2901
					112	1030.7	181.21	177.77	3.3064
					113	1024.8	183.02	179.56	3.3225
					114	1018.9	184.84	181.36	3.3385
					115	1012.9	186.65	183.15	3.3543
					116	1006.8	188.48	184.95	3.3701
					117	1000.6	190.30	186.76	3.3858
					118	994.39	192.13	188.56	3.4013
					119	988.08	193.96	190.37	3.4168
					120	981.68	195.80	192.19	3.4322
					121	975.19	197.64	194.01	3.4475
					122	968.60	199.49	195.83	3.4627
					123	961.91	201.35	197.67	3.4779
					124	955.11	203.22	199.51	3.4930
55	1306.5	88.175	85.460	2.1647	125	948.19	205.10	201.36	3.5081
56	1301.9	89.577	86.853	2.1900	126	941.14	206.99	203.22	3.5231
57	1297.4	90.986	88.253	2.2150	127	933.95	208.89	205.09	3.5382
58	1292.8	92.403	89.660	2.2396	128	926.62	210.81	206.98	3.5532
59	1288.3	93.827	91.074	2.2639	129	919.13	212.74	208.88	3.5683
60	1283.7	95.258	92.495	2.2880	130	911.47	214.69	210.80	3.5834
61	1279.2	96.697	93.924	2.3118	131	903.62	216.67	212.75	3.5985
62	1274.7	98.143	95.361	2.3353	132	895.57	218.67	214.71	3.6137
63	1270.1	99.597	96.805	2.3585	133	887.29	220.70	216.71	3.6290
64	1265.6	101.06	98.257	2.3816	134	878.76	222.77	218.73	3.6445
65	1261.1	102.53	99.717	2.4044	135	869.95	224.87	220.79	3.6601
66	1256.6	104.01	101.19	2.4269	136	860.84	227.01	222.89	3.6759
67	1252.1	105.49	102.66	2.4493	137	851.38	229.20	225.04	3.6920
68	1247.6	106.99	104.15	2.4715	138	841.53	231.45	227.24	3.7084
69	1243.1	108.50	105.64	2.4934	139	831.23	233.77	229.51	3.7251
70	1238.6	110.01	107.15	2.5152	140	820.40	236.17	231.84	3.7423
71	1234.1	111.53	108.66	2.5368	141	808.97	238.58	234.20	3.7594
72	1229.6	113.07	110.18	2.5583	142	796.80	241.10	236.65	3.7773
73	1225.1	114.61	111.72	2.5796	143	783.74	243.76	239.23	3.7959
74	1220.6	116.16	113.26	2.6007	144	769.56	246.58	241.97	3.8156
75	1216.1	117.73	114.81	2.6217	145	753.92	249.61	244.91	3.8366
76	1211.7	119.30	116.37	2.6425	• 145.694	741.94	251.89	247.11	3.8522
77	1207.2	120.89	117.95	2.6632	• 145.694	158.97	357.73	335.42	4.5787
78	1202.7	122.48	119.53	2.6838	146	157.06	358.64	336.06	4.5849
79	1198.3	124.08	121.13	2.7043	147	151.50	361.40	337.99	4.6038
80	1193.8	125.70	122.73	2.7246	148	146.72	363.92	339.75	4.6209
					149	142.53	366.27	341.39	4.6367
					150	138.80	368.47	342.92	4.6515
81	1189.4	127.33	124.34	2.7448	151	135.43	370.56	344.38	4.6654
82	1184.9	128.96	125.97	2.7649	152	132.35	372.56	345.77	4.6785
83	1180.5	130.61	127.61	2.7848	153	129.53	374.48	347.10	4.6911
84	1176.1	132.27	129.25	2.8047	154	126.91	376.33	348.39	4.7032
85	1171.6	133.93	130.91	2.8244	155	124.48	378.12	349.63	4.7148
86	1167.5	135.54	132.50	2.8432	156	122.20	379.86	350.84	4.7259
87	1162.8	137.21	134.16	2.8625	157	120.06	381.55	352.01	4.7368
88	1158.0	138.89	135.83	2.8818	158	118.05	383.20	353.16	4.7472
89	1153.1	140.59	137.51	2.9009	159	116.14	384.82	354.28	4.7574
90	1148.3	142.29	139.20	2.9199	160	114.33	386.39	355.38	4.7673

• PHASE CHANGE

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
161	112.62	387.94	356.45	4.7770	231	62.962	470.47	414.14	5.2072
162	110.98	389.46	357.51	4.7864	232	62.621	471.50	414.87	5.2117
163	109.42	390.96	358.55	4.7956	233	62.284	472.54	415.60	5.2161
164	107.92	392.43	359.57	4.8046	234	61.951	473.57	416.33	5.2206
165	106.49	393.88	360.58	4.8134	235	61.622	474.60	417.05	5.2250
166	105.11	395.31	361.57	4.8220	236	61.298	475.63	417.78	5.2293
167	103.79	396.72	362.55	4.8305	237	60.977	476.66	418.50	5.2337
168	102.52	398.11	363.52	4.8388	238	60.660	477.69	419.23	5.2380
169	101.29	399.49	364.47	4.8470	239	60.348	478.72	419.95	5.2423
170	100.11	400.84	365.42	4.8550	240	60.039	479.74	420.67	5.2466
171	98.966	402.19	366.36	4.8629	241	59.733	480.76	421.39	5.2508
172	97.861	403.52	367.28	4.8706	242	59.431	481.78	422.11	5.2551
173	96.791	404.84	368.20	4.8783	243	59.133	482.80	422.83	5.2593
174	95.754	406.14	369.11	4.8858	244	58.838	483.82	423.55	5.2635
175	94.749	407.44	370.01	4.8932	245	58.547	484.84	424.27	5.2676
176	93.773	408.72	370.90	4.9005	246	58.259	485.86	424.98	5.2718
177	92.826	409.99	371.79	4.9077	247	57.974	486.87	425.70	5.2759
178	91.905	411.25	372.67	4.9148	248	57.692	487.88	426.41	5.2800
179	91.010	412.51	373.54	4.9219	249	57.414	488.90	427.13	5.2840
180	90.138	413.75	374.41	4.9288	250	57.138	489.91	427.84	5.2881
181	89.290	414.99	375.27	4.9356	251	56.866	490.92	428.55	5.2921
182	88.463	416.21	376.12	4.9424	252	56.597	491.93	429.27	5.2961
183	87.657	417.43	376.97	4.9491	253	56.330	492.93	429.98	5.3001
184	86.871	418.64	377.82	4.9557	254	56.066	493.94	430.69	5.3041
185	86.104	419.85	378.66	4.9622	255	55.806	494.95	431.40	5.3081
186	85.355	421.04	379.49	4.9686	256	55.548	495.95	432.11	5.3120
187	84.623	422.23	380.33	4.9750	257	55.292	496.96	432.82	5.3159
188	83.908	423.42	381.15	4.9813	258	55.039	497.96	433.53	5.3198
189	83.209	424.59	381.97	4.9876	259	54.789	498.96	434.23	5.3237
190	82.525	425.77	382.79	4.9938	260	54.542	499.96	434.94	5.3275
191	81.856	426.93	383.61	4.9999	261	54.297	500.96	435.65	5.3314
192	81.201	428.09	384.42	5.0059	262	54.054	501.96	436.35	5.3352
193	80.560	429.25	385.23	5.0119	263	53.814	502.96	437.06	5.3390
194	79.932	430.40	386.03	5.0179	264	53.577	503.96	437.76	5.3428
195	79.317	431.54	386.83	5.0238	265	53.341	504.95	438.47	5.3465
196	78.713	432.68	387.63	5.0296	266	53.108	505.95	439.17	5.3503
197	78.122	433.82	388.42	5.0354	267	52.877	506.94	439.87	5.3540
198	77.542	434.95	389.21	5.0411	268	52.649	507.94	440.58	5.3577
199	76.973	436.07	390.00	5.0468	269	52.423	508.93	441.28	5.3614
200	76.414	437.20	390.79	5.0524	270	52.199	509.92	441.98	5.3651
201	75.866	438.32	391.57	5.0580	271	51.977	510.91	442.68	5.3688
202	75.328	439.43	392.35	5.0635	272	51.757	511.91	443.39	5.3724
203	74.799	440.54	393.13	5.0690	273	51.539	512.90	444.09	5.3761
204	74.279	441.65	393.90	5.0745	274	51.323	513.89	444.79	5.3797
205	73.769	442.75	394.68	5.0798	275	51.110	514.87	445.49	5.3833
206	73.267	443.85	395.45	5.0852	276	50.898	515.86	446.19	5.3869
207	72.774	444.95	396.22	5.0905	277	50.688	516.85	446.89	5.3905
208	72.289	446.04	396.98	5.0958	278	50.480	517.84	447.58	5.3940
209	71.813	447.13	397.75	5.1010	279	50.274	518.82	448.28	5.3976
210	71.343	448.22	398.51	5.1062	280	50.070	519.81	448.98	5.4011
211	70.882	449.30	399.27	5.1113	281	49.868	520.79	449.68	5.4046
212	70.428	450.38	400.03	5.1165	282	49.668	521.78	450.38	5.4081
213	69.980	451.46	400.79	5.1215	283	49.469	522.76	451.07	5.4116
214	69.540	452.54	401.54	5.1266	284	49.272	523.75	451.77	5.4150
215	69.107	453.61	402.29	5.1316	285	49.077	524.73	452.47	5.4185
216	68.680	454.68	403.05	5.1365	286	48.883	525.71	453.16	5.4219
217	68.259	455.75	403.80	5.1415	287	48.692	526.69	453.86	5.4254
218	67.845	456.82	404.54	5.1464	288	48.501	527.68	454.56	5.4288
219	67.437	457.88	405.29	5.1512	289	48.313	528.66	455.25	5.4322
220	67.035	458.94	406.04	5.1561	290	48.126	529.64	455.95	5.4356
221	66.638	460.00	406.78	5.1609	291	47.941	530.62	456.64	5.4389
222	66.248	461.05	407.52	5.1656	292	47.757	531.60	457.34	5.4423
223	65.862	462.11	408.26	5.1704	293	47.575	532.57	458.03	5.4456
224	65.482	463.16	409.00	5.1751	294	47.394	533.55	458.73	5.4490
225	65.107	464.21	409.74	5.1798	295	47.215	534.53	459.42	5.4523
226	64.738	465.26	410.48	5.1844	296	47.037	535.51	460.11	5.4556
227	64.373	466.30	411.21	5.1890	297	46.861	536.49	460.81	5.4589
228	64.013	467.35	411.95	5.1936	298	46.686	537.46	461.50	5.4622
229	63.658	468.39	412.68	5.1982	299	46.513	538.44	462.19	5.4655
230	63.308	469.43	413.41	5.2027	300	46.341	539.42	462.89	5.4687

40.00 ATMOSPHERE ISOBAR

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
					91	1144.5	144.26	140.72	2.9368
					92	1139.5	145.98	142.42	2.9556
					93	1134.5	147.70	144.13	2.9742
					94	1129.5	149.43	145.84	2.9927
					95	1124.5	151.17	147.56	3.0110
					96	1119.4	152.91	149.29	3.0293
					97	1114.3	154.66	151.02	3.0474
					98	1109.1	156.41	152.76	3.0654
					99	1103.9	158.17	154.50	3.0833
					100	1098.7	159.94	156.25	3.1010
					101	1093.4	161.71	158.00	3.1186
					102	1088.1	163.48	159.75	3.1361
					103	1082.8	165.26	161.51	3.1534
					104	1077.4	167.04	163.28	3.1706
					105	1071.9	168.82	165.04	3.1877
					106	1066.5	170.61	166.81	3.2047
					107	1061.0	172.40	168.58	3.2215
					108	1055.4	174.19	170.35	3.2382
					109	1049.8	175.99	172.13	3.2547
					110	1044.1	177.79	173.91	3.2711
					111	1038.4	179.59	175.69	3.2874
					112	1032.6	181.39	177.47	3.3036
					113	1026.8	183.20	179.25	3.3196
					114	1020.9	185.00	181.03	3.3356
					115	1015.0	186.81	182.82	3.3514
					116	1009.0	188.63	184.61	3.3671
					117	1002.9	190.44	186.40	3.3827
					118	996.74	192.26	188.19	3.3981
					119	990.51	194.08	189.99	3.4135
					120	984.20	195.91	191.79	3.4288
					121	977.80	197.75	193.60	3.4440
					122	971.32	199.58	195.41	3.4592
					123	964.74	201.43	197.23	3.4742
					124	958.05	203.28	199.05	3.4892
55	1307.0	88.488	85.387	2.1634	125	951.26	205.15	200.88	3.5042
56	1302.5	89.890	86.778	2.1886	126	944.34	207.02	202.73	3.5191
57	1297.9	91.299	88.176	2.2136	127	937.31	208.90	204.58	3.5340
58	1293.4	92.715	89.581	2.2382	128	930.14	210.80	206.44	3.5489
59	1288.9	94.138	90.994	2.2625	129	922.82	212.71	208.32	3.5638
60	1284.3	95.569	92.413	2.2866	130	915.34	214.64	210.22	3.5787
61	1279.8	97.007	93.840	2.3104	131	907.70	216.60	212.13	3.5937
62	1275.3	98.453	95.275	2.3339	132	899.87	218.57	214.06	3.6087
63	1270.8	99.906	96.717	2.3571	133	891.84	220.57	216.02	3.6237
64	1266.3	101.37	98.167	2.3801	134	883.59	222.60	218.01	3.6389
65	1261.8	102.84	99.625	2.4029	135	875.09	224.66	220.03	3.6543
66	1257.3	104.32	101.09	2.4255	136	866.33	226.76	222.08	3.6698
67	1252.8	105.80	102.57	2.4478	137	857.27	228.90	224.17	3.6855
68	1248.3	107.30	104.05	2.4700	138	847.87	231.09	226.31	3.7014
69	1243.8	108.80	105.54	2.4920	139	838.09	233.34	228.51	3.7176
70	1239.3	110.32	107.04	2.5137	140	827.88	235.66	230.76	3.7342
71	1234.8	111.84	108.56	2.5353	141	817.17	237.97	233.01	3.7507
72	1230.4	113.37	110.08	2.5568	142	805.88	240.38	235.35	3.7678
73	1225.9	114.91	111.61	2.5781	143	793.90	242.89	237.79	3.7854
74	1221.4	116.47	113.15	2.5992	144	781.09	245.53	240.34	3.8038
75	1217.0	118.03	114.70	2.6202	145	767.26	248.32	243.04	3.8231
76	1212.5	119.60	116.26	2.6410	146	752.13	251.31	245.93	3.8437
77	1208.1	121.19	117.83	2.6617	147	735.26	254.56	249.05	3.8659
78	1203.6	122.78	119.41	2.6823	148	715.95	258.17	252.51	3.8904
79	1199.2	124.38	121.00	2.7027	• 148.982	693.32	262.25	256.40	3.9179
80	1194.7	126.00	122.61	2.7230	• 148.982	195.25	351.76	331.00	4.5187
					149	195.04	351.84	331.06	4.5192
					150	185.07	355.72	333.82	4.5452
81	1190.3	127.62	124.22	2.7432	151	177.27	359.01	336.15	4.5671
82	1185.9	129.26	125.84	2.7633	152	170.82	361.94	338.21	4.5864
83	1181.4	130.90	127.47	2.7832	153	165.31	364.60	340.08	4.6038
84	1177.0	132.56	129.12	2.8030	154	160.49	367.07	341.81	4.6199
85	1172.6	134.23	130.77	2.8228	155	156.20	369.38	343.43	4.6349
86	1168.5	135.82	132.35	2.8414	156	152.33	371.57	344.96	4.6489
87	1163.8	137.49	134.01	2.8607	157	148.81	373.66	346.42	4.6623
88	1159.0	139.17	135.68	2.8799	158	145.58	375.66	347.82	4.6750
89	1154.2	140.86	137.35	2.8990	159	142.60	377.58	349.16	4.6871
90	1149.3	142.56	139.03	2.9180	160	139.82	379.44	350.46	4.6988

• PHASE CHANGE

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
161	137.23	381.25	351.71	4.7100	231	72.624	468.36	412.56	5.1657
162	134.80	383.00	352.93	4.7209	232	72.218	469.42	413.30	5.1703
163	132.51	384.71	354.12	4.7314	233	71.816	470.48	414.04	5.1748
164	130.35	386.38	355.29	4.7416	234	71.420	471.53	414.78	5.1793
165	128.30	388.01	356.42	4.7515	235	71.030	472.58	415.52	5.1838
166	126.36	389.61	357.53	4.7612	236	70.644	473.63	416.26	5.1882
167	124.51	391.18	358.62	4.7706	237	70.263	474.68	417.00	5.1927
168	122.74	392.72	359.70	4.7798	238	69.887	475.72	417.73	5.1971
169	121.05	394.23	360.75	4.7888	239	69.516	476.77	418.47	5.2015
170	119.43	395.72	361.79	4.7976	240	69.150	477.81	419.20	5.2058
171	117.88	397.19	362.81	4.8062	241	68.788	478.85	419.93	5.2101
172	116.39	398.64	363.82	4.8147	242	68.430	479.89	420.66	5.2144
173	114.96	400.07	364.81	4.8229	243	68.077	480.93	421.39	5.2187
174	113.57	401.48	365.79	4.8311	244	67.729	481.96	422.12	5.2230
175	112.24	402.87	366.76	4.8391	245	67.384	483.00	422.85	5.2272
176	110.95	404.25	367.72	4.8469	246	67.043	484.03	423.58	5.2314
177	109.71	405.62	368.67	4.8546	247	66.707	485.06	424.30	5.2356
178	108.51	406.97	369.61	4.8623	248	66.374	486.09	425.03	5.2398
179	107.34	408.30	370.54	4.8697	249	66.046	487.12	425.75	5.2439
180	106.21	409.63	371.46	4.8771	250	65.721	488.15	426.48	5.2480
181	105.11	410.94	372.38	4.8844	251	65.400	489.17	427.20	5.2521
182	104.05	412.24	373.28	4.8915	252	65.082	490.20	427.92	5.2562
183	103.01	413.53	374.18	4.8986	253	64.768	491.22	428.64	5.2602
184	102.01	414.81	375.07	4.9056	254	64.458	492.24	429.36	5.2643
185	101.03	416.08	375.96	4.9125	255	64.151	493.26	430.08	5.2683
186	100.08	417.34	376.84	4.9193	256	63.847	494.28	430.80	5.2723
187	99.152	418.59	377.71	4.9260	257	63.547	495.30	431.52	5.2762
188	98.248	419.83	378.58	4.9326	258	63.250	496.31	432.24	5.2802
189	97.367	421.06	379.44	4.9391	259	62.956	497.33	432.95	5.2841
190	96.507	422.29	380.29	4.9456	260	62.665	498.34	433.67	5.2880
191	95.668	423.51	381.15	4.9520	261	62.377	499.36	434.38	5.2919
192	94.848	424.72	381.99	4.9583	262	62.093	500.37	435.10	5.2958
193	94.047	425.93	382.83	4.9646	263	61.811	501.38	435.81	5.2996
194	93.264	427.13	383.67	4.9708	264	61.532	502.39	436.52	5.3035
195	92.499	428.32	384.50	4.9769	265	61.256	503.40	437.24	5.3073
196	91.750	429.51	385.33	4.9830	266	60.983	504.41	437.95	5.3111
197	91.017	430.69	386.16	4.9890	267	60.713	505.42	438.66	5.3148
198	90.299	431.86	386.98	4.9950	268	60.445	506.42	439.37	5.3186
199	89.596	433.03	387.79	5.0008	269	60.180	507.43	440.08	5.3224
200	88.908	434.19	388.61	5.0067	270	59.918	508.43	440.79	5.3261
201	88.233	435.35	389.42	5.0125	271	59.658	509.44	441.50	5.3298
202	87.572	436.50	390.22	5.0182	272	59.401	510.44	442.21	5.3335
203	86.923	437.65	391.03	5.0239	273	59.146	511.44	442.92	5.3372
204	86.286	438.80	391.83	5.0295	274	58.894	512.44	443.62	5.3408
205	85.662	439.94	392.62	5.0350	275	58.645	513.44	444.33	5.3445
206	85.049	441.07	393.42	5.0406	276	58.397	514.44	445.04	5.3481
207	84.448	442.20	394.21	5.0460	277	58.152	515.44	445.74	5.3517
208	83.857	443.33	395.00	5.0515	278	57.909	516.44	446.45	5.3553
209	83.276	444.45	395.79	5.0569	279	57.669	517.44	447.16	5.3589
210	82.706	445.57	396.57	5.0622	280	57.431	518.43	447.86	5.3624
211	82.146	446.69	397.35	5.0675	281	57.195	519.43	448.56	5.3660
212	81.595	447.80	398.13	5.0728	282	56.961	520.42	449.27	5.3695
213	81.053	448.91	398.91	5.0780	283	56.729	521.42	449.97	5.3731
214	80.521	450.01	399.68	5.0832	284	56.500	522.41	450.68	5.3766
215	79.997	451.12	400.45	5.0883	285	56.272	523.40	451.38	5.3800
216	79.481	452.22	401.22	5.0934	286	56.047	524.40	452.08	5.3835
217	78.974	453.31	401.99	5.0985	287	55.823	525.39	452.78	5.3870
218	78.475	454.40	402.76	5.1035	288	55.602	526.38	453.49	5.3904
219	77.984	455.49	403.52	5.1085	289	55.382	527.37	454.19	5.3939
220	77.500	456.58	404.28	5.1134	290	55.165	528.36	454.89	5.3973
221	77.023	457.66	405.04	5.1183	291	54.949	529.35	455.59	5.4007
222	76.554	458.74	405.80	5.1232	292	54.735	530.34	456.29	5.4041
223	76.092	459.82	406.56	5.1281	293	54.523	531.33	456.99	5.4075
224	75.636	460.90	407.31	5.1329	294	54.313	532.31	457.69	5.4108
225	75.187	461.97	408.07	5.1377	295	54.105	533.30	458.39	5.4142
226	74.745	463.04	408.82	5.1424	296	53.898	534.29	459.09	5.4175
227	74.309	464.11	409.57	5.1471	297	53.693	535.27	459.79	5.4208
228	73.879	465.18	410.32	5.1518	298	53.490	536.26	460.49	5.4242
229	73.455	466.24	411.07	5.1565	299	53.289	537.24	461.19	5.4275
230	73.037	467.30	411.81	5.1611	300	53.089	538.23	461.88	5.4307

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
					91	1145.6	144.53	140.55	2.9349
					92	1140.6	146.25	142.25	2.9536
					93	1135.7	147.96	143.95	2.9722
					94	1130.7	149.69	145.66	2.9907
					95	1125.7	151.42	147.37	3.0090
					96	1120.6	153.16	149.09	3.0272
					97	1115.5	154.91	150.82	3.0453
					98	1110.4	156.66	152.55	3.0633
					99	1105.3	158.42	154.29	3.0811
					100	1100.1	160.18	156.03	3.0988
					101	1094.8	161.94	157.78	3.1164
					102	1089.5	163.71	159.53	3.1338
					103	1084.2	165.49	161.28	3.1511
					104	1078.9	167.26	163.04	3.1683
					105	1073.5	169.04	164.80	3.1853
					106	1068.1	170.83	166.56	3.2022
					107	1062.6	172.61	168.32	3.2190
					108	1057.1	174.40	170.09	3.2356
					109	1051.5	176.19	171.85	3.2521
					110	1045.9	177.98	173.62	3.2685
					111	1040.2	179.78	175.39	3.2848
					112	1034.5	181.57	177.17	3.3009
					113	1028.8	183.37	178.94	3.3168
					114	1022.9	185.17	180.72	3.3327
					115	1017.1	186.98	182.49	3.3485
					116	1011.1	188.78	184.27	3.3641
					117	1005.1	190.59	186.05	3.3796
					118	999.03	192.40	187.84	3.3950
					119	992.88	194.21	189.62	3.4103
					120	986.66	196.03	191.41	3.4255
					121	980.36	197.85	193.20	3.4407
					122	973.97	199.68	195.00	3.4557
					123	967.49	201.51	196.80	3.4707
					124	960.91	203.36	198.61	3.4856
55	1307.5	88.802	85.315	2.1620	125	954.24	205.20	200.43	3.5004
56	1303.0	90.203	86.704	2.1873	126	947.45	207.06	202.25	3.5152
57	1298.5	91.612	88.100	2.2122	127	940.55	208.93	204.08	3.5300
58	1294.0	93.027	89.503	2.2368	128	933.53	210.81	205.92	3.5447
59	1289.4	94.450	90.914	2.2612	129	926.37	212.70	207.78	3.5595
60	1284.9	95.880	92.332	2.2852	130	919.07	214.61	209.65	3.5742
61	1280.4	97.318	93.757	2.3090	131	911.61	216.54	211.54	3.5890
62	1275.9	98.763	95.189	2.3325	132	903.99	218.49	213.44	3.6038
63	1271.4	100.22	96.630	2.3557	133	896.18	220.46	215.37	3.6187
64	1266.9	101.68	98.078	2.3787	134	888.18	222.46	217.32	3.6336
65	1262.4	103.15	99.534	2.4015	135	879.96	224.48	219.30	3.6487
66	1258.0	104.62	101.00	2.4240	136	871.51	226.54	221.31	3.6639
67	1253.5	106.11	102.47	2.4464	137	862.79	228.64	223.36	3.6793
68	1249.0	107.60	103.95	2.4685	138	853.78	230.78	225.44	3.6948
69	1244.5	109.11	105.44	2.4905	139	844.45	232.97	227.58	3.7107
70	1240.1	110.62	106.94	2.5123	140	834.75	235.22	229.76	3.7268
71	1235.6	112.14	108.45	2.5339	141	824.64	237.46	231.93	3.7427
72	1231.1	113.68	109.97	2.5553	142	814.05	239.78	234.18	3.7591
73	1226.7	115.22	111.50	2.5766	143	802.92	242.18	236.50	3.7759
74	1222.2	116.77	113.04	2.5977	144	791.14	244.68	238.91	3.7934
75	1217.8	118.33	114.59	2.6186	145	778.59	247.30	241.44	3.8115
76	1213.3	119.90	116.15	2.6395	146	765.10	250.07	244.11	3.8306
77	1208.9	121.49	117.71	2.6601	147	750.45	253.01	246.94	3.8507
78	1204.5	123.08	119.29	2.6807	148	734.29	256.19	249.98	3.8723
79	1200.0	124.68	120.88	2.7011	149	716.09	259.67	253.30	3.8958
80	1195.6	126.30	122.48	2.7214	150	694.92	263.59	257.03	3.9220
81	1191.2	127.92	124.09	2.7416	151	668.97	268.21	261.40	3.9527
82	1186.8	129.56	125.71	2.7617	• 151.968	634.76	274.00	266.82	3.9910
83	1182.4	131.20	127.34	2.7816	• 151.968	243.05	343.42	324.66	4.4478
84	1178.0	132.86	128.98	2.8014	152	242.23	343.66	324.83	4.4493
85	1173.6	134.52	130.63	2.8211	153	223.09	349.62	329.18	4.4885
86	1169.5	136.11	132.21	2.8397	154	210.41	354.04	332.37	4.5172
87	1164.8	137.77	133.86	2.8590	155	200.76	357.70	334.99	4.5409
88	1160.0	139.45	135.52	2.8781	156	192.92	360.90	337.27	4.5616
89	1155.2	141.14	137.19	2.8972	157	186.29	363.79	339.32	4.5800
90	1150.4	142.83	138.87	2.9161	158	180.55	366.45	341.19	4.5969
					159	175.47	368.92	342.94	4.6125
					160	170.93	371.26	344.58	4.6271

• PHASE CHANGE

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
161	166.81	373.47	346.13	4.6409	231	82.460	466.25	410.95	5.1282
162	163.05	375.58	347.62	4.6540	232	81.983	467.32	411.71	5.1329
163	159.58	377.61	349.04	4.6665	233	81.512	468.40	412.46	5.1375
164	156.37	379.56	350.40	4.6784	234	81.049	469.48	413.22	5.1421
165	153.38	381.46	351.73	4.6899	235	80.591	470.55	413.97	5.1467
166	150.58	383.29	353.01	4.7010	236	80.140	471.62	414.72	5.1512
167	147.95	385.07	354.25	4.7117	237	79.695	472.68	415.47	5.1557
168	145.47	386.81	355.47	4.7221	238	79.256	473.75	416.22	5.1602
169	143.13	388.51	356.65	4.7322	239	78.823	474.81	416.97	5.1647
170	140.91	390.17	357.81	4.7420	240	78.395	475.87	417.71	5.1691
171	138.79	391.80	358.95	4.7515	241	77.973	476.93	418.46	5.1735
172	136.78	393.39	360.06	4.7608	242	77.557	477.99	419.20	5.1779
173	134.86	394.96	361.15	4.7699	243	77.145	479.05	419.94	5.1822
174	133.02	396.50	362.22	4.7788	244	76.739	480.10	420.68	5.1865
175	131.26	398.02	363.28	4.7875	245	76.338	481.15	421.42	5.1908
176	129.57	399.51	364.32	4.7960	246	75.942	482.20	422.16	5.1951
177	127.95	400.99	365.35	4.8043	247	75.551	483.25	422.90	5.1994
178	126.38	402.44	366.36	4.8125	248	75.165	484.29	423.63	5.2036
179	124.88	403.87	367.36	4.8206	249	74.783	485.34	424.37	5.2078
180	123.42	405.29	368.35	4.8285	250	74.406	486.38	425.10	5.2120
181	122.02	406.69	369.33	4.8362	251	74.034	487.42	425.83	5.2161
182	120.66	408.08	370.29	4.8439	252	73.665	488.46	426.57	5.2203
183	119.35	409.45	371.25	4.8514	253	73.301	489.50	427.30	5.2244
184	118.08	410.81	372.19	4.8588	254	72.942	490.54	428.03	5.2285
185	116.84	412.15	373.13	4.8661	255	72.586	491.57	428.76	5.2325
186	115.65	413.49	374.06	4.8732	256	72.235	492.61	429.48	5.2366
187	114.49	414.81	374.98	4.8803	257	71.887	493.64	430.21	5.2406
188	113.36	416.12	375.89	4.8873	258	71.543	494.67	430.94	5.2446
189	112.26	417.41	376.80	4.8942	259	71.204	495.70	431.66	5.2486
190	111.19	418.70	377.70	4.9010	260	70.868	496.73	432.39	5.2526
191	110.15	419.98	378.59	4.9077	261	70.535	497.76	433.11	5.2565
192	109.14	421.25	379.47	4.9143	262	70.206	498.78	433.83	5.2604
193	108.15	422.51	380.35	4.9209	263	69.881	499.81	434.56	5.2643
194	107.19	423.77	381.23	4.9274	264	69.559	500.83	435.28	5.2682
195	106.25	425.01	382.10	4.9338	265	69.241	501.85	436.00	5.2721
196	105.33	426.25	382.96	4.9401	266	68.926	502.87	436.72	5.2759
197	104.44	427.48	383.82	4.9463	267	68.614	503.89	437.44	5.2798
198	103.56	428.70	384.67	4.9525	268	68.306	504.91	438.16	5.2836
199	102.71	429.91	385.52	4.9587	269	68.001	505.93	438.88	5.2874
200	101.87	431.12	386.36	4.9647	270	67.699	506.95	439.59	5.2911
201	101.05	432.32	387.20	4.9707	271	67.400	507.96	440.31	5.2949
202	100.25	433.52	388.04	4.9766	272	67.104	508.98	441.03	5.2986
203	99.466	434.71	388.87	4.9825	273	66.811	509.99	441.74	5.3023
204	98.698	435.89	389.69	4.9883	274	66.521	511.00	442.46	5.3060
205	97.945	437.07	390.52	4.9941	275	66.233	512.01	443.17	5.3097
206	97.208	438.24	391.34	4.9998	276	65.949	513.02	443.89	5.3134
207	96.485	439.41	392.16	5.0055	277	65.667	514.03	444.60	5.3170
208	95.776	440.58	392.97	5.0111	278	65.388	515.04	445.31	5.3207
209	95.080	441.73	393.78	5.0166	279	65.112	516.05	446.02	5.3243
210	94.398	442.89	394.58	5.0221	280	64.839	517.06	446.74	5.3279
211	93.728	444.04	395.39	5.0276	281	64.568	518.06	447.45	5.3315
212	93.070	445.18	396.19	5.0330	282	64.299	519.07	448.16	5.3351
213	92.424	446.32	396.99	5.0384	283	64.033	520.07	448.87	5.3386
214	91.789	447.46	397.78	5.0437	284	63.770	521.08	449.58	5.3422
215	91.166	448.59	398.58	5.0490	285	63.509	522.08	450.29	5.3457
216	90.553	449.72	399.37	5.0542	286	63.251	523.08	451.00	5.3492
217	89.951	450.84	400.15	5.0594	287	62.994	524.09	451.70	5.3527
218	89.359	451.96	400.94	5.0645	288	62.741	525.09	452.41	5.3562
219	88.776	453.08	401.72	5.0697	289	62.489	526.09	453.12	5.3596
220	88.203	454.19	402.50	5.0747	290	62.240	527.09	453.83	5.3631
221	87.640	455.31	403.28	5.0798	291	61.993	528.08	454.53	5.3665
222	87.085	456.41	404.05	5.0848	292	61.748	529.08	455.24	5.3700
223	86.539	457.52	404.83	5.0897	293	61.505	530.08	455.95	5.3734
224	86.002	458.62	405.60	5.0947	294	61.265	531.08	456.65	5.3768
225	85.473	459.72	406.37	5.0996	295	61.026	532.07	457.36	5.3801
226	84.952	460.81	407.14	5.1044	296	60.790	533.07	458.06	5.3835
227	84.438	461.90	407.90	5.1092	297	60.556	534.06	458.77	5.3869
228	83.933	462.99	408.67	5.1140	298	60.323	535.06	459.47	5.3902
229	83.434	464.08	409.43	5.1188	299	60.093	536.05	460.18	5.3935
230	82.943	465.16	410.19	5.1235	300	59.865	537.05	460.88	5.3969

50.00 ATMOSPHERE ISOBAR

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
					91	1146.6	144.81	140.39	2.9331
					92	1141.8	146.51	142.08	2.9517
					93	1136.8	148.23	143.77	2.9703
					94	1131.9	149.95	145.48	2.9887
					95	1126.9	151.68	147.19	3.0070
					96	1121.9	153.42	148.90	3.0252
					97	1116.8	155.16	150.63	3.0433
					98	1111.7	156.91	152.35	3.0612
					99	1106.6	158.66	154.08	3.0790
					100	1101.4	160.42	155.82	3.0966
					101	1096.2	162.18	157.56	3.1142
					102	1091.0	163.95	159.30	3.1316
					103	1085.7	165.72	161.05	3.1488
					104	1080.4	167.49	162.80	3.1660
					105	1075.0	169.27	164.55	3.1830
					106	1069.6	171.05	166.31	3.1998
					107	1064.2	172.83	168.07	3.2166
					108	1058.7	174.61	169.82	3.2331
					109	1053.2	176.40	171.58	3.2496
					110	1047.6	178.18	173.35	3.2659
					111	1042.0	179.97	175.11	3.2821
					112	1036.4	181.76	176.87	3.2982
					113	1030.7	183.55	178.64	3.3141
					114	1024.9	185.35	180.40	3.3299
					115	1019.1	187.14	182.17	3.3456
					116	1013.2	188.94	183.94	3.3611
					117	1007.3	190.74	185.71	3.3766
					118	1001.3	192.54	187.48	3.3919
					119	995.21	194.35	189.26	3.4072
					120	989.07	196.16	191.03	3.4223
					121	982.85	197.97	192.81	3.4373
					122	976.55	199.79	194.60	3.4523
					123	970.17	201.61	196.39	3.4672
					124	963.70	203.44	198.18	3.4820
					125	957.14	205.27	199.98	3.4967
56	1303.5	90.516	86.630	2.1859	126	950.47	207.11	201.78	3.5114
57	1299.0	91.924	88.024	2.2109	127	943.70	208.97	203.60	3.5260
58	1294.5	93.339	89.426	2.2355	128	936.81	210.83	205.42	3.5407
59	1290.0	94.762	90.835	2.2598	129	929.80	212.71	207.26	3.5553
60	1285.5	96.192	92.251	2.2838	130	922.66	214.60	209.11	3.5699
61	1281.0	97.629	93.674	2.3076	131	915.37	216.50	210.97	3.5845
62	1276.5	99.073	95.105	2.3311	132	907.94	218.43	212.85	3.5991
63	1272.1	100.53	96.543	2.3543	133	900.34	220.37	214.74	3.6138
64	1267.6	101.99	97.989	2.3773	134	892.56	222.34	216.66	3.6285
65	1263.1	103.45	99.444	2.4001	135	884.59	224.34	218.61	3.6434
66	1258.6	104.93	100.91	2.4226	136	876.41	226.36	220.58	3.6583
67	1254.2	106.42	102.38	2.4450	137	868.00	228.42	222.58	3.6734
68	1249.7	107.91	103.86	2.4671	138	859.33	230.52	224.62	3.6886
69	1245.3	109.41	105.35	2.4890	139	850.38	232.66	226.70	3.7041
70	1240.8	110.93	106.84	2.5108	140	841.12	234.85	228.83	3.7198
71	1236.4	112.45	108.35	2.5324	141	831.51	237.03	230.93	3.7353
72	1231.9	113.98	109.87	2.5538	142	821.50	239.26	233.10	3.7511
73	1227.5	115.52	111.39	2.5751	143	811.05	241.57	235.33	3.7673
74	1223.0	117.07	112.93	2.5962	144	800.07	243.97	237.64	3.7840
75	1218.6	118.63	114.48	2.6171	145	788.50	246.46	240.03	3.8013
76	1214.2	120.20	116.03	2.6379	146	776.21	249.06	242.54	3.8192
77	1209.8	121.79	117.60	2.6586	147	763.07	251.81	245.17	3.8379
78	1205.3	123.38	119.18	2.6792	148	748.89	254.71	247.95	3.8577
79	1200.9	124.98	120.76	2.6996	149	733.39	257.82	250.91	3.8786
80	1196.5	126.59	122.36	2.7199	150	716.17	261.19	254.12	3.9012
					151	696.59	264.92	257.64	3.9260
81	1192.1	128.22	123.97	2.7400	152	673.52	269.15	261.63	3.9540
82	1187.7	129.85	125.59	2.7601	153	644.62	274.22	266.36	3.9873
83	1183.3	131.50	127.21	2.7800	154	603.28	281.08	272.69	4.0320
84	1178.9	133.15	128.85	2.7998	• 154.707	547.24	289.94	280.68	4.0894
85	1174.5	134.81	130.50	2.8195	• 154.707	321.63	329.33	313.58	4.3440
86	1170.5	136.39	132.06	2.8380	155	297.79	334.82	317.80	4.3795
87	1165.8	138.06	133.71	2.8572	156	262.84	343.94	324.67	4.4382
88	1161.1	139.73	135.37	2.8764	157	243.98	349.60	328.84	4.4743
89	1156.3	141.41	137.03	2.8954	158	230.66	354.01	332.05	4.5023
90	1151.5	143.11	138.71	2.9143	159	220.28	357.74	334.74	4.5259
					160	211.75	361.02	337.10	4.5465

• PHASE CHANGE

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
161	204.49	364.00	339.22	4.5650	231	92.468	464.11	409.32	5.0939
162	198.18	366.73	341.17	4.5819	232	91.915	465.22	410.10	5.0986
163	192.59	369.29	342.98	4.5976	233	91.371	466.31	410.87	5.1033
164	187.58	371.69	344.68	4.6123	234	90.835	467.41	411.64	5.1080
165	183.03	373.97	346.29	4.6262	235	90.307	468.50	412.40	5.1127
166	178.88	376.15	347.83	4.6394	236	89.786	469.59	413.17	5.1173
167	175.05	378.24	349.30	4.6519	237	89.272	470.68	413.93	5.1219
168	171.50	380.26	350.72	4.6640	238	88.766	471.77	414.69	5.1265
169	168.20	382.20	352.08	4.6755	239	88.267	472.85	415.45	5.1310
170	165.11	384.09	353.41	4.6866	240	87.774	473.93	416.21	5.1355
171	162.21	385.92	354.69	4.6974	241	87.288	475.01	416.97	5.1400
172	159.47	387.71	355.94	4.7078	242	86.809	476.08	417.72	5.1445
173	156.89	389.45	357.16	4.7179	243	86.336	477.16	418.48	5.1489
174	154.44	391.16	358.35	4.7277	244	85.870	478.23	419.23	5.1533
175	152.11	392.83	359.52	4.7373	245	85.409	479.30	419.98	5.1577
176	149.89	394.46	360.66	4.7466	246	84.954	480.36	420.73	5.1620
177	147.77	396.07	361.79	4.7557	247	84.506	481.43	421.48	5.1664
178	145.75	397.65	362.89	4.7646	248	84.063	482.49	422.23	5.1706
179	143.81	399.20	363.97	4.7733	249	83.625	483.55	422.97	5.1749
180	141.95	400.73	365.04	4.7818	250	83.193	484.61	423.72	5.1792
181	140.16	402.24	366.09	4.7902	251	82.766	485.67	424.46	5.1834
182	138.44	403.72	367.13	4.7984	252	82.345	486.73	425.20	5.1876
183	136.78	405.19	368.15	4.8064	253	81.928	487.78	425.94	5.1918
184	135.18	406.64	369.16	4.8143	254	81.517	488.83	426.68	5.1959
185	133.64	408.07	370.16	4.8221	255	81.110	489.88	427.42	5.2000
186	132.15	409.48	371.15	4.8297	256	80.708	490.93	428.16	5.2041
187	130.71	410.88	372.12	4.8372	257	80.311	491.98	428.90	5.2082
188	129.31	412.27	373.09	4.8446	258	79.919	493.02	429.63	5.2123
189	127.95	413.64	374.04	4.8519	259	79.531	494.07	430.37	5.2163
190	126.64	415.00	374.99	4.8590	260	79.148	495.11	431.10	5.2203
191	125.36	416.34	375.93	4.8661	261	78.768	496.15	431.83	5.2243
192	124.13	417.68	376.86	4.8730	262	78.394	497.19	432.57	5.2283
193	122.92	419.00	377.78	4.8799	263	78.023	498.23	433.30	5.2323
194	121.75	420.31	378.70	4.8867	264	77.656	499.27	434.03	5.2362
195	120.61	421.61	379.61	4.8934	265	77.294	500.30	434.76	5.2401
196	119.50	422.90	380.51	4.9000	266	76.935	501.34	435.49	5.2440
197	118.42	424.19	381.40	4.9065	267	76.580	502.37	436.21	5.2479
198	117.36	425.46	382.29	4.9130	268	76.230	503.40	436.94	5.2517
199	116.33	426.73	383.17	4.9193	269	75.882	504.43	437.67	5.2556
200	115.33	427.98	384.05	4.9256	270	75.539	505.46	438.39	5.2594
201	114.34	429.23	384.92	4.9319	271	75.199	506.49	439.12	5.2632
202	113.38	430.47	385.79	4.9380	272	74.863	507.51	439.84	5.2670
203	112.45	431.71	386.65	4.9441	273	74.530	508.54	440.56	5.2707
204	111.53	432.93	387.51	4.9502	274	74.200	509.56	441.29	5.2745
205	110.64	434.15	388.36	4.9561	275	73.874	510.59	442.01	5.2782
206	109.76	435.37	389.21	4.9620	276	73.551	511.61	442.73	5.2819
207	108.90	436.57	390.05	4.9679	277	73.232	512.63	443.45	5.2856
208	108.06	437.78	390.89	4.9737	278	72.915	513.65	444.17	5.2893
209	107.24	438.97	391.73	4.9794	279	72.602	514.67	444.89	5.2929
210	106.43	440.16	392.56	4.9851	280	72.292	515.69	445.61	5.2966
211	105.64	441.35	393.39	4.9907	281	71.985	516.70	446.33	5.3002
212	104.86	442.52	394.21	4.9963	282	71.681	517.72	447.04	5.3038
213	104.10	443.70	395.03	5.0018	283	71.380	518.74	447.76	5.3074
214	103.35	444.87	395.85	5.0073	284	71.081	519.75	448.48	5.3110
215	102.62	446.03	396.66	5.0127	285	70.786	520.76	449.19	5.3146
216	101.90	447.19	397.47	5.0181	286	70.493	521.78	449.91	5.3181
217	101.19	448.35	398.28	5.0234	287	70.203	522.79	450.62	5.3216
218	100.50	449.50	399.09	5.0287	288	69.916	523.80	451.34	5.3252
219	99.819	450.64	399.89	5.0340	289	69.632	524.81	452.05	5.3287
220	99.149	451.79	400.69	5.0392	290	69.350	525.82	452.76	5.3321
221	98.491	452.93	401.49	5.0443	291	69.070	526.83	453.48	5.3356
222	97.844	454.06	402.28	5.0495	292	68.794	527.83	454.19	5.3391
223	97.207	455.19	403.07	5.0545	293	68.519	528.84	454.90	5.3425
224	96.581	456.32	403.86	5.0596	294	68.248	529.85	455.61	5.3459
225	95.965	457.44	404.65	5.0646	295	67.978	530.85	456.32	5.3494
226	95.359	458.56	405.43	5.0696	296	67.711	531.86	457.03	5.3528
227	94.763	459.68	406.22	5.0745	297	67.447	532.86	457.75	5.3561
228	94.176	460.79	407.00	5.0794	298	67.185	533.86	458.46	5.3595
229	93.598	461.90	407.77	5.0842	299	66.925	534.87	459.17	5.3629
230	93.028	463.01	408.55	5.0891	300	66.667	535.87	459.87	5.3662

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
					91	1148.8	145.35	140.06	2.9293
					92	1144.0	147.05	141.74	2.9479
					93	1139.1	148.76	143.43	2.9664
					94	1134.2	150.48	145.12	2.9848
					95	1129.2	152.20	146.82	3.0031
					96	1124.3	153.93	148.53	3.0212
					97	1119.3	155.67	150.24	3.0392
					98	1114.2	157.41	151.96	3.0570
					99	1109.1	159.16	153.68	3.0748
					100	1104.0	160.91	155.40	3.0924
					101	1098.9	162.66	157.13	3.1098
					102	1093.7	164.42	158.87	3.1271
					103	1088.5	166.19	160.60	3.1443
					104	1083.3	167.95	162.34	3.1614
					105	1078.0	169.72	164.08	3.1783
					106	1072.7	171.49	165.82	3.1951
					107	1067.4	173.26	167.57	3.2117
					108	1062.0	175.04	169.31	3.2282
					109	1056.5	176.81	171.06	3.2446
					110	1051.1	178.59	172.80	3.2608
					111	1045.6	180.37	174.55	3.2769
					112	1040.0	182.14	176.30	3.2929
					113	1034.4	183.93	178.05	3.3087
					114	1028.8	185.71	179.80	3.3244
					115	1023.1	187.49	181.55	3.3400
					116	1017.3	189.27	183.30	3.3554
					117	1011.5	191.06	185.05	3.3707
					118	1005.6	192.84	186.80	3.3859
					119	999.72	194.63	188.55	3.4010
					120	993.73	196.42	190.31	3.4160
					121	987.67	198.22	192.06	3.4309
					122	981.55	200.01	193.82	3.4457
					123	975.35	201.82	195.58	3.4604
					124	969.07	203.62	197.35	3.4750
					125	962.71	205.43	199.12	3.4896
56	1304.6	91.143	86.483	2.1833	126	956.26	207.25	200.89	3.5040
57	1300.1	92.550	87.874	2.2082	127	949.72	209.07	202.67	3.5185
58	1295.7	93.965	89.272	2.2328	128	943.08	210.91	204.46	3.5328
59	1291.2	95.386	90.678	2.2571	129	936.33	212.75	206.26	3.5472
60	1286.7	96.815	92.090	2.2811	130	929.48	214.61	208.07	3.5615
61	1282.3	98.251	93.510	2.3048	131	922.50	216.47	209.88	3.5758
62	1277.8	99.695	94.937	2.3283	132	915.40	218.36	211.72	3.5901
63	1273.4	101.15	96.371	2.3515	133	908.16	220.26	213.56	3.6045
64	1268.9	102.61	97.814	2.3745	134	900.78	222.18	215.43	3.6189
65	1264.5	104.07	99.264	2.3972	135	893.24	224.12	217.31	3.6333
66	1260.0	105.55	100.72	2.4198	136	885.52	226.08	219.22	3.6478
67	1255.6	107.03	102.19	2.4421	137	877.63	228.08	221.15	3.6624
68	1251.1	108.53	103.67	2.4642	138	869.53	230.10	223.11	3.6771
69	1246.7	110.03	105.15	2.4861	139	861.22	232.16	225.10	3.6920
70	1242.3	111.54	106.64	2.5079	140	852.67	234.26	227.13	3.7071
71	1237.9	113.06	108.15	2.5294	141	843.86	236.33	229.13	3.7218
72	1233.5	114.59	109.66	2.5508	142	834.75	238.45	231.17	3.7368
73	1229.0	116.13	111.18	2.5721	143	825.33	240.62	233.26	3.7520
74	1224.6	117.68	112.71	2.5932	144	815.55	242.86	235.40	3.7676
75	1220.2	119.24	114.26	2.6141	145	805.37	245.16	237.61	3.7836
76	1215.8	120.81	115.81	2.6349	146	794.73	247.55	239.90	3.8000
77	1211.4	122.39	117.37	2.6556	147	783.57	250.02	242.26	3.8169
78	1207.1	123.98	118.94	2.6761	148	771.81	252.59	244.72	3.8344
79	1202.7	125.58	120.53	2.6965	149	759.35	255.29	247.28	3.8525
80	1198.3	127.19	122.12	2.7168	150	746.05	258.11	249.97	3.8715
81	1193.9	128.81	123.72	2.7369	151	731.75	261.10	252.79	3.8913
82	1189.5	130.45	125.34	2.7569	152	716.21	264.27	255.78	3.9123
83	1185.2	132.09	126.96	2.7768	153	699.09	267.65	258.96	3.9345
84	1180.8	133.74	128.59	2.7966	154	679.93	271.28	262.34	3.9582
85	1176.4	135.40	130.24	2.8163	155	657.95	275.11	265.87	3.9831
86	1172.4	136.96	131.78	2.8345	156	631.89	279.95	270.32	4.0142
87	1167.8	138.62	133.42	2.8537	157	599.35	285.78	275.63	4.0514
88	1163.1	140.29	135.06	2.8728	158	555.20	293.47	282.52	4.1002
89	1158.4	141.97	136.72	2.8918	159	488.37	305.05	292.60	4.1733
90	1153.6	143.65	138.38	2.9106	160	404.98	320.48	305.47	4.2701

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
161	350.80	331.95	314.61	4.3415	231	113.00	459.82	406.02	5.0324
162	318.63	339.68	320.60	4.3894	232	112.28	460.97	406.82	5.0374
163	296.66	345.52	325.03	4.4254	233	111.57	462.11	407.62	5.0423
164	280.16	350.31	328.61	4.4546	234	110.88	463.25	408.42	5.0472
165	267.02	354.41	331.65	4.4796	235	110.19	464.39	409.22	5.0520
166	256.14	358.05	334.31	4.5016	236	109.52	465.53	410.01	5.0568
167	246.87	361.33	336.71	4.5213	237	108.86	466.66	410.81	5.0616
168	238.80	364.36	338.90	4.5393	238	108.20	467.78	411.60	5.0664
169	231.68	367.17	340.92	4.5560	239	107.56	468.91	412.38	5.0711
170	225.30	369.80	342.82	4.5716	240	106.92	470.03	413.17	5.0758
171	219.54	372.30	344.61	4.5862	241	106.30	471.14	413.95	5.0804
172	214.28	374.67	346.30	4.6001	242	105.68	472.26	414.73	5.0850
173	209.46	376.94	347.92	4.6132	243	105.08	473.37	415.51	5.0896
174	205.00	379.12	349.47	4.6258	244	104.48	474.48	416.29	5.0942
175	200.86	381.23	350.96	4.6378	245	103.89	475.58	417.07	5.0987
176	196.99	383.26	352.40	4.6494	246	103.31	476.69	417.84	5.1032
177	193.37	385.23	353.79	4.6606	247	102.73	477.79	418.61	5.1076
178	189.97	387.15	355.14	4.6714	248	102.17	478.89	419.38	5.1121
179	186.76	389.01	356.46	4.6818	249	101.61	479.98	420.15	5.1165
180	183.72	390.83	357.74	4.6920	250	101.06	481.07	420.92	5.1209
181	180.84	392.61	358.99	4.7018	251	100.52	482.17	421.68	5.1252
182	178.11	394.35	360.22	4.7114	252	99.981	483.25	422.45	5.1295
183	175.50	396.06	361.42	4.7208	253	99.452	484.34	423.21	5.1338
184	173.01	397.73	362.59	4.7299	254	98.929	485.42	423.97	5.1381
185	170.63	399.37	363.74	4.7388	255	98.414	486.51	424.73	5.1424
186	168.35	400.99	364.88	4.7475	256	97.904	487.58	425.49	5.1466
187	166.16	402.58	365.99	4.7560	257	97.401	488.66	426.25	5.1508
188	164.06	404.15	367.09	4.7644	258	96.905	489.74	427.00	5.1550
189	162.03	405.69	368.17	4.7726	259	96.414	490.81	427.76	5.1591
190	160.09	407.21	369.23	4.7806	260	95.930	491.88	428.51	5.1633
191	158.21	408.71	370.29	4.7885	261	95.451	492.95	429.26	5.1674
192	156.39	410.20	371.32	4.7962	262	94.978	494.02	430.01	5.1714
193	154.64	411.66	372.35	4.8038	263	94.511	495.09	430.76	5.1755
194	152.95	413.11	373.36	4.8113	264	94.049	496.15	431.51	5.1795
195	151.31	414.55	374.37	4.8187	265	93.593	497.21	432.25	5.1836
196	149.72	415.96	375.36	4.8260	266	93.142	498.27	433.00	5.1875
197	148.17	417.37	376.34	4.8331	267	92.696	499.33	433.75	5.1915
198	146.68	418.76	377.31	4.8402	268	92.255	500.39	434.49	5.1955
199	145.22	420.14	378.28	4.8471	269	91.819	501.44	435.23	5.1994
200	143.81	421.50	379.23	4.8539	270	91.388	502.50	435.97	5.2033
201	142.44	422.86	380.18	4.8607	271	90.962	503.55	436.71	5.2072
202	141.10	424.20	381.11	4.8674	272	90.540	504.60	437.45	5.2111
203	139.80	425.53	382.05	4.8739	273	90.123	505.65	438.19	5.2149
204	138.53	426.86	382.97	4.8804	274	89.711	506.70	438.93	5.2188
205	137.29	428.17	383.89	4.8869	275	89.303	507.75	439.67	5.2226
206	136.08	429.47	384.80	4.8932	276	88.899	508.79	440.40	5.2264
207	134.91	430.77	385.70	4.8995	277	88.500	509.84	441.14	5.2301
208	133.76	432.05	386.60	4.9057	278	88.105	510.88	441.87	5.2339
209	132.63	433.33	387.49	4.9118	279	87.714	511.92	442.61	5.2376
210	131.54	434.60	388.38	4.9178	280	87.327	512.96	443.34	5.2414
211	130.47	435.86	389.26	4.9238	281	86.944	514.00	444.07	5.2451
212	129.42	437.11	390.14	4.9298	282	86.565	515.04	444.81	5.2488
213	128.39	438.36	391.01	4.9356	283	86.190	516.07	445.54	5.2524
214	127.39	439.60	391.87	4.9414	284	85.818	517.11	446.27	5.2561
215	126.40	440.83	392.74	4.9472	285	85.450	518.14	446.99	5.2597
216	125.44	442.06	393.59	4.9529	286	85.086	519.17	447.72	5.2633
217	124.50	443.28	394.45	4.9585	287	84.726	520.21	448.45	5.2669
218	123.57	444.50	395.30	4.9641	288	84.369	521.24	449.18	5.2705
219	122.66	445.70	396.14	4.9696	289	84.016	522.27	449.91	5.2741
220	121.78	446.91	396.98	4.9751	290	83.666	523.30	450.63	5.2776
221	120.90	448.11	397.82	4.9806	291	83.319	524.32	451.36	5.2812
222	120.05	449.30	398.66	4.9859	292	82.976	525.35	452.08	5.2847
223	119.21	450.49	399.49	4.9913	293	82.636	526.38	452.81	5.2882
224	118.38	451.67	400.31	4.9966	294	82.299	527.40	453.53	5.2917
225	117.57	452.85	401.14	5.0018	295	81.965	528.42	454.25	5.2952
226	116.78	454.02	401.96	5.0070	296	81.635	529.45	454.97	5.2986
227	115.99	455.19	402.78	5.0122	297	81.307	530.47	455.70	5.3021
228	115.23	456.35	403.59	5.0173	298	80.983	531.49	456.42	5.3055
229	114.47	457.51	404.40	5.0224	299	80.661	532.51	457.14	5.3089
230	113.73	458.67	405.21	5.0274	300	80.342	533.53	457.86	5.3123

70.00 ATMOSPHERE ISOBAR

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
					91	1150.9	145.90	139.73	2.9257
					92	1146.1	147.59	141.41	2.9442
					93	1141.3	149.30	143.08	2.9626
					94	1136.4	151.01	144.77	2.9810
					95	1131.5	152.73	146.46	2.9991
					96	1126.6	154.45	148.16	3.0172
					97	1121.7	156.18	149.86	3.0351
					98	1116.7	157.92	151.57	3.0529
					99	1111.7	159.66	153.28	3.0706
					100	1106.6	161.40	154.99	3.0881
					101	1101.6	163.15	156.71	3.1055
					102	1096.5	164.90	158.44	3.1228
					103	1091.3	166.66	160.16	3.1399
					104	1086.1	168.42	161.89	3.1569
					105	1080.9	170.18	163.62	3.1737
					106	1075.7	171.94	165.35	3.1904
					107	1070.4	173.70	167.08	3.2070
					108	1065.1	175.47	168.81	3.2234
					109	1059.8	177.24	170.54	3.2397
					110	1054.4	179.00	172.28	3.2558
					111	1049.0	180.77	174.01	3.2718
					112	1043.5	182.54	175.74	3.2877
					113	1038.0	184.31	177.48	3.3034
					114	1032.5	186.08	179.21	3.3190
					115	1026.9	187.85	180.94	3.3345
					116	1021.3	189.62	182.67	3.3498
					117	1015.6	191.39	184.41	3.3650
					118	1009.8	193.16	186.14	3.3801
					119	1004.1	194.94	187.87	3.3951
					120	998.20	196.71	189.61	3.4099
					121	992.29	198.49	191.34	3.4247
					122	986.32	200.27	193.08	3.4393
					123	980.29	202.05	194.81	3.4539
					124	974.18	203.84	196.55	3.4683
					125	968.00	205.62	198.30	3.4827
56	1305.7	91.771	86.339	2.1806	126	961.75	207.42	200.04	3.4970
57	1301.3	93.177	87.726	2.2055	127	955.41	209.22	201.80	3.5112
58	1296.8	94.590	89.121	2.2301	128	948.99	211.03	203.55	3.5254
59	1292.4	96.011	90.523	2.2544	129	942.48	212.84	205.32	3.5395
60	1287.9	97.439	91.932	2.2784	130	935.88	214.67	207.09	3.5536
61	1283.5	98.874	93.348	2.3021	131	929.17	216.50	208.87	3.5677
62	1279.1	100.32	94.771	2.3255	132	922.35	218.35	210.66	3.5817
63	1274.6	101.77	96.202	2.3487	133	915.42	220.21	212.46	3.5958
64	1270.2	103.22	97.641	2.3717	134	908.37	222.09	214.28	3.6098
65	1265.8	104.69	99.088	2.3944	135	901.19	223.98	216.11	3.6239
66	1261.4	106.17	100.54	2.4170	136	893.86	225.90	217.97	3.6381
67	1257.0	107.65	102.01	2.4393	137	886.39	227.84	219.84	3.6523
68	1252.6	109.14	103.48	2.4614	138	878.76	229.81	221.74	3.6666
69	1248.2	110.64	104.96	2.4833	139	870.95	231.80	223.66	3.6810
70	1243.8	112.15	106.45	2.5050	140	862.95	233.83	225.61	3.6955
71	1239.4	113.67	107.95	2.5265	141	854.76	235.82	227.52	3.7097
72	1235.0	115.20	109.46	2.5479	142	846.34	237.85	229.47	3.7240
73	1230.6	116.74	110.97	2.5691	143	837.68	239.92	231.45	3.7386
74	1226.3	118.29	112.50	2.5902	144	828.75	242.04	233.48	3.7534
75	1221.9	119.84	114.04	2.6111	145	819.54	244.22	235.56	3.7684
76	1217.5	121.41	115.59	2.6319	146	810.00	246.45	237.69	3.7838
77	1213.1	122.99	117.15	2.6525	147	800.11	248.75	239.89	3.7996
78	1208.8	124.58	118.71	2.6731	148	789.82	251.13	242.15	3.8157
79	1204.4	126.18	120.29	2.6934	149	779.09	253.58	244.48	3.8323
80	1200.1	127.79	121.88	2.7137	150	767.85	256.13	246.89	3.8493
81	1195.7	129.41	123.48	2.7338	151	756.03	258.77	249.38	3.8669
82	1191.4	131.04	125.09	2.7538	152	743.55	261.51	251.97	3.8850
83	1187.0	132.68	126.71	2.7737	153	730.29	264.34	254.63	3.9037
84	1182.7	134.33	128.34	2.7935	154	716.12	267.26	257.36	3.9227
85	1178.4	135.99	129.98	2.8131	155	700.86	270.12	260.00	3.9413
86	1174.3	137.53	131.49	2.8312	156	684.29	273.56	263.19	3.9634
87	1169.7	139.19	133.13	2.8503	157	666.10	277.24	266.59	3.9869
88	1165.1	140.85	134.76	2.8693	158	645.87	281.24	270.26	4.0123
89	1160.4	142.53	136.41	2.8882	159	623.07	285.64	274.26	4.0401
90	1155.7	144.21	138.07	2.9070	160	596.96	290.59	278.70	4.0711

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
161	566.68	296.23	283.71	4.1062	231	134.20	455.50	402.65	4.9781
162	531.62	302.73	289.39	4.1465	232	133.29	456.70	403.48	4.9833
163	492.50	310.09	295.69	4.1918	233	132.40	457.89	404.32	4.9884
164	452.58	317.87	302.20	4.2394	234	131.53	459.08	405.15	4.9935
165	416.29	325.36	308.32	4.2849	235	130.67	460.26	405.98	4.9985
166	385.88	332.08	313.70	4.3255	236	129.82	461.44	406.81	5.0036
167	361.15	337.95	318.31	4.3608	237	128.99	462.61	407.63	5.0085
168	340.97	343.08	322.28	4.3914	238	128.17	463.79	408.45	5.0134
169	324.24	347.62	325.74	4.4183	239	127.37	464.95	409.26	5.0183
170	310.12	351.69	328.82	4.4424	240	126.58	466.11	410.08	5.0232
171	298.00	355.39	331.59	4.4641	241	125.80	467.27	410.89	5.0280
172	287.43	358.79	334.12	4.4839	242	125.03	468.43	411.70	5.0328
173	278.10	361.95	336.45	4.5022	243	124.28	469.58	412.51	5.0375
174	269.78	364.91	338.62	4.5193	244	123.53	470.73	413.31	5.0423
175	262.28	367.69	340.65	4.5352	245	122.80	471.87	414.11	5.0469
176	255.46	370.33	342.57	4.5503	246	122.08	473.01	414.91	5.0516
177	249.23	372.85	344.39	4.5645	247	121.37	474.15	415.71	5.0562
178	243.50	375.26	346.13	4.5781	248	120.67	475.28	416.50	5.0608
179	238.20	377.57	347.79	4.5910	249	119.98	476.41	417.30	5.0653
180	233.27	379.80	349.39	4.6034	250	119.30	477.54	418.09	5.0698
181	228.67	381.95	350.93	4.6154	251	118.63	478.67	418.88	5.0743
182	224.36	384.03	352.42	4.6269	252	117.97	479.79	419.66	5.0788
183	220.30	386.06	353.86	4.6379	253	117.31	480.91	420.45	5.0832
184	216.48	388.03	355.26	4.6487	254	116.67	482.02	421.23	5.0876
185	212.87	389.95	356.63	4.6591	255	116.04	483.14	422.01	5.0920
186	209.45	391.82	357.96	4.6692	256	115.41	484.25	422.79	5.0964
187	206.19	393.65	359.26	4.6790	257	114.79	485.36	423.57	5.1007
188	203.10	395.45	360.53	4.6886	258	114.18	486.46	424.35	5.1050
189	200.14	397.21	361.77	4.6979	259	113.58	487.57	425.12	5.1092
190	197.32	398.93	362.99	4.7070	260	112.99	488.67	425.89	5.1135
191	194.62	400.63	364.18	4.7159	261	112.40	489.77	426.66	5.1177
192	192.03	402.29	365.36	4.7246	262	111.82	490.86	427.43	5.1219
193	189.54	403.93	366.51	4.7331	263	111.25	491.96	428.20	5.1261
194	187.16	405.54	367.65	4.7415	264	110.69	493.05	428.97	5.1302
195	184.85	407.13	368.76	4.7496	265	110.13	494.14	429.73	5.1343
196	182.64	408.70	369.87	4.7577	266	109.58	495.23	430.50	5.1384
197	180.50	410.25	370.95	4.7655	267	109.04	496.31	431.26	5.1425
198	178.44	411.78	372.03	4.7733	268	108.50	497.39	432.02	5.1465
199	176.44	413.29	373.09	4.7809	269	107.97	498.48	432.78	5.1506
200	174.51	414.78	374.13	4.7883	270	107.44	499.56	433.54	5.1546
201	172.64	416.25	375.17	4.7957	271	106.92	500.63	434.30	5.1586
202	170.83	417.71	376.19	4.8029	272	106.41	501.71	435.06	5.1625
203	169.07	419.16	377.21	4.8101	273	105.91	502.78	435.81	5.1665
204	167.36	420.59	378.21	4.8171	274	105.40	503.86	436.57	5.1704
205	165.71	422.00	379.20	4.8240	275	104.91	504.93	437.32	5.1743
206	164.09	423.41	380.18	4.8309	276	104.42	506.00	438.07	5.1782
207	162.53	424.80	381.16	4.8376	277	103.94	507.06	438.82	5.1820
208	161.00	426.18	382.12	4.8442	278	103.46	508.13	439.57	5.1859
209	159.52	427.55	383.08	4.8508	279	102.98	509.19	440.32	5.1897
210	158.07	428.90	384.03	4.8573	280	102.51	510.25	441.07	5.1935
211	156.66	430.25	384.97	4.8637	281	102.05	511.32	441.81	5.1973
212	155.29	431.59	385.91	4.8700	282	101.59	512.37	442.56	5.2010
213	153.95	432.91	386.84	4.8762	283	101.14	513.43	443.30	5.2048
214	152.64	434.23	387.76	4.8824	284	100.69	514.49	444.05	5.2085
215	151.36	435.54	388.68	4.8885	285	100.25	515.54	444.79	5.2122
216	150.11	436.84	389.59	4.8946	286	99.808	516.60	445.53	5.2159
217	148.88	438.13	390.49	4.9005	287	99.373	517.65	446.27	5.2196
218	147.69	439.42	391.39	4.9064	288	98.942	518.70	447.01	5.2232
219	146.52	440.69	392.28	4.9123	289	98.517	519.75	447.75	5.2269
220	145.37	441.96	393.17	4.9180	290	98.095	520.80	448.49	5.2305
221	144.25	443.22	394.05	4.9238	291	97.677	521.85	449.23	5.2341
222	143.16	444.48	394.93	4.9294	292	97.264	522.89	449.97	5.2377
223	142.08	445.73	395.81	4.9350	293	96.855	523.94	450.71	5.2413
224	141.03	446.97	396.68	4.9406	294	96.450	524.98	451.44	5.2448
225	140.00	448.20	397.54	4.9461	295	96.048	526.02	452.18	5.2484
226	138.98	449.43	398.40	4.9516	296	95.651	527.06	452.91	5.2519
227	137.99	450.66	399.26	4.9570	297	95.258	528.10	453.64	5.2554
228	137.01	451.88	400.11	4.9623	298	94.868	529.14	454.38	5.2589
229	136.06	453.09	400.96	4.9676	299	94.482	530.18	455.11	5.2624
230	135.12	454.30	401.80	4.9729	300	94.099	531.22	455.84	5.2658

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
					91	1153.0	146.45	139.42	2.9220
					92	1148.2	148.14	141.08	2.9405
					93	1143.5	149.84	142.75	2.9589
					94	1138.6	151.54	144.43	2.9772
					95	1133.8	153.26	146.11	2.9953
					96	1128.9	154.98	147.80	3.0133
					97	1124.0	156.70	149.49	3.0312
					98	1119.1	158.43	151.19	3.0489
					99	1114.2	160.17	152.89	3.0665
					100	1109.2	161.90	154.60	3.0840
					101	1104.2	163.65	156.30	3.1013
					102	1099.1	165.39	158.02	3.1185
					103	1094.0	167.14	159.73	3.1356
					104	1088.9	168.89	161.45	3.1525
					105	1083.8	170.64	163.16	3.1693
					106	1078.6	172.40	164.88	3.1859
					107	1073.4	174.15	166.60	3.2024
					108	1068.2	175.91	168.32	3.2187
					109	1063.0	177.67	170.04	3.2349
					110	1057.7	179.43	171.76	3.2510
					111	1052.3	181.19	173.48	3.2669
					112	1047.0	182.94	175.20	3.2827
					113	1041.6	184.70	176.92	3.2983
					114	1036.1	186.46	178.64	3.3138
					115	1030.6	188.22	180.36	3.3292
					116	1025.1	189.98	182.07	3.3444
					117	1019.5	191.74	183.79	3.3595
					118	1013.9	193.50	185.50	3.3745
					119	1008.2	195.26	187.22	3.3893
					120	1002.5	197.02	188.93	3.4041
					121	996.73	198.78	190.65	3.4187
					122	990.90	200.54	192.36	3.4332
					123	985.02	202.31	194.08	3.4476
					124	979.07	204.07	195.80	3.4619
					125	973.06	205.84	197.51	3.4761
56	1306.8	92.399	86.196	2.1780	126	966.98	207.62	199.24	3.4902
57	1302.4	93.804	87.580	2.2028	127	960.83	209.40	200.96	3.5043
58	1297.9	95.217	88.971	2.2274	128	954.60	211.18	202.69	3.5183
59	1293.5	96.636	90.370	2.2517	129	948.30	212.97	204.42	3.5322
60	1289.1	98.063	91.775	2.2757	130	941.91	214.77	206.16	3.5461
61	1284.7	99.497	93.188	2.2994	131	935.44	216.57	207.91	3.5599
62	1280.3	100.94	94.608	2.3228	132	928.87	218.39	209.66	3.5738
63	1275.9	102.39	96.035	2.3460	133	922.21	220.22	211.43	3.5876
64	1271.5	103.85	97.470	2.3689	134	915.44	222.06	213.21	3.6014
65	1267.1	105.31	98.913	2.3917	135	908.57	223.92	215.00	3.6152
66	1262.8	106.78	100.36	2.4142	136	901.57	225.80	216.80	3.6290
67	1258.4	108.27	101.82	2.4364	137	894.45	227.69	218.63	3.6429
68	1254.0	109.76	103.29	2.4585	138	887.20	229.61	220.47	3.6568
69	1249.6	111.26	104.77	2.4804	139	879.81	231.55	222.33	3.6708
70	1245.3	112.76	106.26	2.5021	140	872.26	233.52	224.22	3.6850
71	1240.9	114.28	107.75	2.5237	141	864.56	235.44	226.07	3.6987
72	1236.6	115.81	109.25	2.5450	142	856.68	237.40	227.94	3.7125
73	1232.2	117.35	110.77	2.5662	143	848.61	239.40	229.84	3.7265
74	1227.9	118.89	112.29	2.5873	144	840.33	241.43	231.78	3.7407
75	1223.5	120.45	113.83	2.6082	145	831.84	243.51	233.76	3.7551
76	1219.2	122.02	115.37	2.6289	146	823.11	245.64	235.79	3.7698
77	1214.8	123.60	116.92	2.6496	147	814.11	247.82	237.86	3.7847
78	1210.5	125.18	118.49	2.6700	148	804.84	250.05	239.98	3.7999
79	1206.2	126.78	120.06	2.6904	149	795.25	252.35	242.16	3.8154
80	1201.9	128.39	121.65	2.7106	150	785.31	254.72	244.40	3.8312
81	1197.5	130.01	123.24	2.7308	151	775.00	257.15	246.69	3.8474
82	1193.2	131.64	124.85	2.7507	152	764.26	259.64	249.04	3.8639
83	1188.9	133.28	126.46	2.7706	153	753.05	262.19	251.43	3.8807
84	1184.6	134.93	128.08	2.7904	154	741.31	264.77	253.83	3.8975
85	1180.3	136.59	129.72	2.8100	155	728.97	267.21	256.09	3.9134
86	1176.2	138.11	131.22	2.8278	156	715.95	270.13	258.81	3.9322
87	1171.6	139.76	132.84	2.8469	157	702.16	273.17	261.63	3.9516
88	1167.0	141.42	134.47	2.8658	158	687.47	276.35	264.56	3.9718
89	1162.4	143.08	136.11	2.8847	159	671.75	279.68	267.62	3.9928
90	1157.7	144.76	137.76	2.9034	160	654.86	283.21	270.83	4.0149

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
161	636.59	286.95	274.22	4.0382	231	156.02	451.17	399.21	4.9291
162	616.78	290.95	277.81	4.0630	232	154.91	452.42	400.09	4.9345
163	595.25	295.25	281.63	4.0894	233	153.81	453.66	400.96	4.9398
164	571.91	299.87	285.70	4.1177	234	152.74	454.90	401.83	4.9451
165	546.87	304.83	290.00	4.1478	235	151.68	456.13	402.69	4.9504
166	520.55	310.07	294.50	4.1795	236	150.65	457.36	403.55	4.9556
167	493.73	315.51	299.10	4.2122	237	149.63	458.58	404.40	4.9607
168	467.44	321.00	303.66	4.2449	238	148.63	459.79	405.26	4.9658
169	442.64	326.36	308.05	4.2768	239	147.65	461.00	406.10	4.9709
170	419.95	331.49	312.19	4.3070	240	146.69	462.21	406.95	4.9760
171	399.60	336.31	316.02	4.3353	241	145.74	463.41	407.79	4.9809
172	381.52	340.80	319.55	4.3615	242	144.81	464.61	408.63	4.9859
173	365.52	344.98	322.80	4.3857	243	143.89	465.80	409.46	4.9908
174	351.32	348.86	325.79	4.4081	244	142.99	466.98	410.30	4.9957
175	338.67	352.49	328.56	4.4289	245	142.10	468.17	411.12	5.0005
176	327.34	355.90	331.13	4.4483	246	141.23	469.35	411.95	5.0053
177	317.14	359.10	333.54	4.4664	247	140.37	470.52	412.77	5.0101
178	307.89	362.12	335.80	4.4835	248	139.52	471.69	413.60	5.0148
179	299.46	365.00	337.93	4.4996	249	138.69	472.86	414.41	5.0195
180	291.73	367.74	339.95	4.5149	250	137.87	474.02	415.23	5.0242
181	284.62	370.36	341.88	4.5294	251	137.06	475.18	416.04	5.0288
182	278.05	372.87	343.72	4.5432	252	136.27	476.34	416.85	5.0334
183	271.94	375.29	345.48	4.5565	253	135.48	477.49	417.66	5.0380
184	266.25	377.62	347.17	4.5692	254	134.71	478.64	418.47	5.0425
185	260.92	379.88	348.81	4.5814	255	133.95	479.79	419.27	5.0470
186	255.93	382.06	350.39	4.5932	256	133.19	480.93	420.07	5.0515
187	251.23	384.18	351.92	4.6046	257	132.45	482.07	420.87	5.0560
188	246.79	386.25	353.40	4.6156	258	131.72	483.21	421.67	5.0604
189	242.59	388.26	354.85	4.6263	259	131.00	484.34	422.47	5.0648
190	238.61	390.22	356.25	4.6366	260	130.29	485.48	423.26	5.0691
191	234.83	392.14	357.62	4.6467	261	129.59	486.60	424.05	5.0734
192	231.23	394.02	358.96	4.6565	262	128.90	487.73	424.84	5.0777
193	227.79	395.86	360.27	4.6660	263	128.22	488.85	425.63	5.0820
194	224.51	397.66	361.56	4.6754	264	127.54	489.97	426.42	5.0863
195	221.37	399.43	362.82	4.6845	265	126.88	491.09	427.20	5.0905
196	218.36	401.17	364.05	4.6934	266	126.22	492.20	427.98	5.0947
197	215.48	402.88	365.26	4.7021	267	125.57	493.32	428.77	5.0989
198	212.70	404.56	366.45	4.7106	268	124.93	494.43	429.54	5.1030
199	210.03	406.22	367.63	4.7189	269	124.30	495.54	430.32	5.1072
200	207.46	407.85	368.78	4.7271	270	123.68	496.64	431.10	5.1113
201	204.98	409.46	369.92	4.7351	271	123.06	497.74	431.87	5.1153
202	202.59	411.05	371.04	4.7430	272	122.45	498.84	432.65	5.1194
203	200.28	412.62	372.15	4.7508	273	121.85	499.94	433.42	5.1234
204	198.04	414.17	373.24	4.7584	274	121.26	501.04	434.19	5.1274
205	195.88	415.70	374.32	4.7659	275	120.67	502.13	434.96	5.1314
206	193.79	417.21	375.39	4.7732	276	120.09	503.23	435.73	5.1354
207	191.75	418.71	376.44	4.7805	277	119.52	504.32	436.49	5.1393
208	189.78	420.19	377.48	4.7876	278	118.95	505.41	437.26	5.1433
209	187.87	421.66	378.51	4.7947	279	118.39	506.49	438.02	5.1472
210	186.01	423.11	379.53	4.8016	280	117.83	507.58	438.79	5.1510
211	184.20	424.55	380.55	4.8084	281	117.29	508.66	439.55	5.1549
212	182.45	425.98	381.55	4.8152	282	116.74	509.74	440.31	5.1587
213	180.74	427.39	382.54	4.8218	283	116.21	510.82	441.07	5.1626
214	179.07	428.79	383.52	4.8284	284	115.68	511.90	441.83	5.1664
215	177.45	430.18	384.50	4.8349	285	115.15	512.98	442.58	5.1701
216	175.86	431.56	385.47	4.8412	286	114.64	514.05	443.34	5.1739
217	174.32	432.93	386.43	4.8476	287	114.12	515.12	444.09	5.1776
218	172.81	434.29	387.38	4.8538	288	113.62	516.19	444.85	5.1814
219	171.34	435.63	388.32	4.8600	289	113.11	517.26	445.60	5.1851
220	169.91	436.97	389.26	4.8661	290	112.62	518.33	446.35	5.1888
221	168.50	438.30	390.20	4.8721	291	112.13	519.40	447.10	5.1924
222	167.13	439.62	391.12	4.8781	292	111.64	520.46	447.85	5.1961
223	165.79	440.94	392.04	4.8840	293	111.16	521.53	448.60	5.1997
224	164.48	442.24	392.96	4.8898	294	110.68	522.59	449.35	5.2034
225	163.19	443.54	393.87	4.8956	295	110.21	523.65	450.10	5.2070
226	161.94	444.83	394.77	4.9013	296	109.74	524.71	450.85	5.2105
227	160.70	446.11	395.67	4.9070	297	109.28	525.77	451.59	5.2141
228	159.50	447.38	396.56	4.9126	298	108.82	526.83	452.34	5.2177
229	158.32	448.65	397.45	4.9181	299	108.37	527.88	453.08	5.2212
230	157.16	449.91	398.33	4.9236	300	107.92	528.94	453.83	5.2247

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
					91	1155.0	147.00	139.10	2.9185
					92	1150.3	148.69	140.76	2.9369
					93	1145.6	150.38	142.42	2.9552
					94	1140.8	152.08	144.09	2.9734
					95	1136.0	153.79	145.76	2.9915
					96	1131.2	155.50	147.44	3.0094
					97	1126.4	157.22	149.13	3.0272
					98	1121.5	158.95	150.82	3.0449
					99	1116.6	160.68	152.51	3.0625
					100	1111.7	162.41	154.20	3.0799
					101	1106.7	164.14	155.90	3.0972
					102	1101.7	165.88	157.61	3.1143
					103	1096.7	167.62	159.31	3.1313
					104	1091.7	169.37	161.02	3.1481
					105	1086.6	171.11	162.72	3.1649
					106	1081.5	172.86	164.43	3.1814
					107	1076.4	174.61	166.14	3.1978
					108	1071.2	176.36	167.85	3.2141
					109	1066.0	178.11	169.56	3.2302
					110	1060.8	179.86	171.26	3.2462
					111	1055.6	181.61	172.97	3.2621
					112	1050.3	183.36	174.68	3.2777
					113	1045.0	185.11	176.38	3.2933
					114	1039.6	186.86	178.09	3.3087
					115	1034.2	188.61	179.79	3.3240
					116	1028.8	190.35	181.49	3.3391
					117	1023.3	192.10	183.19	3.3541
					118	1017.8	193.85	184.89	3.3690
					119	1012.3	195.60	186.59	3.3837
					120	1006.7	197.34	188.28	3.3983
					121	1001.0	199.09	189.98	3.4128
					122	995.31	200.84	191.68	3.4272
					123	989.56	202.59	193.37	3.4415
					124	983.75	204.34	195.07	3.4557
					125	977.89	206.09	196.76	3.4697
56	1307.9	93.028	86.055	2.1754	126	971.97	207.84	198.46	3.4837
57	1303.5	94.432	87.436	2.2002	127	965.99	209.60	200.16	3.4976
58	1299.1	95.844	88.824	2.2248	128	959.94	211.36	201.86	3.5115
59	1294.7	97.262	90.219	2.2490	129	953.82	213.13	203.57	3.5252
60	1290.3	98.688	91.621	2.2730	130	947.63	214.91	205.28	3.5389
61	1286.0	100.12	93.030	2.2967	131	941.37	216.69	207.00	3.5526
62	1281.6	101.56	94.447	2.3201	132	935.02	218.48	208.72	3.5662
63	1277.2	103.01	95.870	2.3433	133	928.59	220.28	210.46	3.5798
64	1272.9	104.47	97.302	2.3662	134	922.07	222.09	212.20	3.5933
65	1268.5	105.93	98.742	2.3889	135	915.46	223.91	213.95	3.6069
66	1264.1	107.40	100.19	2.4114	136	908.75	225.75	215.72	3.6205
67	1259.8	108.88	101.65	2.4337	137	901.93	227.61	217.50	3.6341
68	1255.4	110.37	103.11	2.4557	138	895.01	229.48	219.30	3.6477
69	1251.1	111.87	104.58	2.4776	139	887.96	231.38	221.11	3.6614
70	1246.8	113.38	106.06	2.4993	140	880.79	233.30	222.95	3.6752
71	1242.4	114.90	107.56	2.5208	141	873.49	235.17	224.73	3.6885
72	1238.1	116.42	109.06	2.5421	142	866.04	237.08	226.55	3.7019
73	1233.8	117.96	110.57	2.5633	143	858.45	239.01	228.39	3.7155
74	1229.5	119.50	112.09	2.5844	144	850.69	240.98	230.26	3.7292
75	1225.2	121.06	113.62	2.6053	145	842.76	242.98	232.16	3.7431
76	1220.8	122.63	115.16	2.6260	146	834.65	245.02	234.10	3.7572
77	1216.5	124.20	116.71	2.6466	147	826.33	247.11	236.08	3.7715
78	1212.2	125.79	118.27	2.6671	148	817.80	249.25	238.10	3.7860
79	1207.9	127.39	119.84	2.6874	149	809.04	251.43	240.16	3.8007
80	1203.6	128.99	121.42	2.7076	150	800.03	253.67	242.27	3.8157
81	1199.4	130.61	123.01	2.7277	151	790.75	255.96	244.43	3.8310
82	1195.1	132.24	124.61	2.7477	152	781.17	258.29	246.62	3.8464
83	1190.8	133.88	126.22	2.7675	153	771.26	260.66	248.84	3.8620
84	1186.5	135.52	127.84	2.7873	154	761.01	263.02	251.04	3.8774
85	1182.2	137.18	129.47	2.8069	155	750.37	265.22	253.07	3.8917
86	1178.0	138.69	130.94	2.8245	156	739.31	267.86	255.53	3.9087
87	1173.5	140.33	132.56	2.8435	157	727.78	270.58	258.05	3.9261
88	1168.9	141.98	134.18	2.8624	158	715.73	273.37	260.63	3.9438
89	1164.3	143.65	135.81	2.8812	159	703.12	276.24	263.28	3.9619
90	1159.7	145.32	137.45	2.8999	160	689.88	279.22	266.00	3.9806

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
161	675.95	282.30	268.81	3.9998	231	178.40	446.85	395.74	4.8841
162	661.27	285.51	271.72	4.0196	232	177.06	448.15	396.65	4.8897
163	645.77	288.85	274.73	4.0402	233	175.74	449.45	397.56	4.8953
164	629.39	292.35	277.86	4.0616	234	174.45	450.74	398.46	4.9008
165	612.10	296.00	281.10	4.0838	235	173.19	452.02	399.36	4.9063
166	593.90	299.82	284.46	4.1069	236	171.95	453.29	400.26	4.9117
167	574.85	303.81	287.94	4.1308	237	170.73	454.56	401.14	4.9170
168	555.08	307.95	291.52	4.1555	238	169.53	455.82	402.03	4.9224
169	534.83	312.22	295.17	4.1809	239	168.36	457.08	402.91	4.9276
170	514.43	316.58	298.86	4.2066	240	167.21	458.33	403.79	4.9328
171	494.24	320.98	302.52	4.2324	241	166.08	459.57	404.66	4.9380
172	474.64	325.34	306.13	4.2579	242	164.97	460.81	405.53	4.9431
173	455.92	329.63	309.63	4.2827	243	163.88	462.04	406.39	4.9482
174	438.30	333.80	312.99	4.3067	244	162.80	463.27	407.26	4.9533
175	421.89	337.82	316.20	4.3298	245	161.75	464.49	408.11	4.9583
176	406.72	341.67	319.24	4.3517	246	160.71	465.71	408.97	4.9632
177	392.76	345.35	322.13	4.3725	247	159.69	466.92	409.82	4.9682
178	379.92	348.86	324.85	4.3923	248	158.69	468.13	410.67	4.9730
179	368.13	352.21	327.43	4.4111	249	157.70	469.34	411.51	4.9779
180	357.29	355.40	329.88	4.4289	250	156.73	470.54	412.35	4.9827
181	347.29	358.46	332.20	4.4458	251	155.78	471.73	413.19	4.9875
182	338.06	361.39	334.41	4.4620	252	154.84	472.92	414.03	4.9922
183	329.51	364.20	336.52	4.4774	253	153.91	474.11	414.86	4.9969
184	321.57	366.90	338.54	4.4921	254	153.00	475.29	415.69	5.0016
185	314.18	369.50	340.47	4.5062	255	152.10	476.47	416.52	5.0062
186	307.28	372.01	342.33	4.5197	256	151.22	477.65	417.34	5.0108
187	300.81	374.44	344.12	4.5327	257	150.34	478.82	418.17	5.0154
188	294.74	376.79	345.85	4.5453	258	149.48	479.99	418.99	5.0199
189	289.03	379.07	347.52	4.5574	259	148.64	481.16	419.80	5.0244
190	283.65	381.29	349.14	4.5691	260	147.80	482.32	420.62	5.0289
191	278.56	383.44	350.71	4.5804	261	146.98	483.47	421.43	5.0333
192	273.74	385.55	352.23	4.5914	262	146.17	484.63	422.24	5.0378
193	269.16	387.60	353.72	4.6020	263	145.37	485.78	423.05	5.0421
194	264.81	389.61	355.17	4.6124	264	144.58	486.93	423.86	5.0465
195	260.66	391.57	356.58	4.6225	265	143.80	488.08	424.66	5.0508
196	256.71	393.49	357.97	4.6323	266	143.03	489.22	425.46	5.0551
197	252.93	395.37	359.32	4.6419	267	142.27	490.36	426.26	5.0594
198	249.31	397.22	360.64	4.6513	268	141.53	491.49	427.06	5.0637
199	245.84	399.04	361.94	4.6604	269	140.79	492.63	427.86	5.0679
200	242.52	400.82	363.22	4.6694	270	140.06	493.76	428.65	5.0721
201	239.32	402.57	364.47	4.6781	271	139.34	494.89	429.44	5.0763
202	236.25	404.30	365.70	4.6867	272	138.63	496.02	430.23	5.0804
203	233.29	406.00	366.91	4.6951	273	137.93	497.14	431.02	5.0845
204	230.44	407.67	368.10	4.7033	274	137.24	498.26	431.81	5.0886
205	227.69	409.33	369.28	4.7114	275	136.55	499.38	432.60	5.0927
206	225.03	410.96	370.43	4.7193	276	135.88	500.50	433.38	5.0968
207	222.46	412.57	371.57	4.7271	277	135.21	501.61	434.16	5.1008
208	219.98	414.16	372.70	4.7348	278	134.55	502.72	434.95	5.1048
209	217.57	415.73	373.81	4.7423	279	133.90	503.83	435.73	5.1088
210	215.24	417.28	374.91	4.7497	280	133.26	504.94	436.50	5.1127
211	212.98	418.81	376.00	4.7570	281	132.62	506.04	437.28	5.1167
212	210.79	420.33	377.07	4.7642	282	131.99	507.15	438.06	5.1206
213	208.66	421.84	378.13	4.7713	283	131.37	508.25	438.83	5.1245
214	206.59	423.32	379.18	4.7782	284	130.76	509.35	439.60	5.1284
215	204.58	424.80	380.22	4.7851	285	130.15	510.44	440.37	5.1322
216	202.62	426.26	381.25	4.7919	286	129.55	511.54	441.15	5.1361
217	200.71	427.71	382.27	4.7986	287	128.95	512.63	441.91	5.1399
218	198.86	429.14	383.28	4.8052	288	128.37	513.72	442.68	5.1437
219	197.05	430.57	384.29	4.8117	289	127.79	514.81	443.45	5.1475
220	195.29	431.98	385.28	4.8181	290	127.21	515.90	444.21	5.1512
221	193.57	433.38	386.27	4.8245	291	126.64	516.99	444.98	5.1550
222	191.89	434.77	387.24	4.8307	292	126.08	518.07	445.74	5.1587
223	190.25	436.15	388.21	4.8369	293	125.52	519.15	446.50	5.1624
224	188.65	437.52	389.18	4.8431	294	124.97	520.24	447.27	5.1661
225	187.09	438.87	390.13	4.8491	295	124.43	521.31	448.03	5.1697
226	185.56	440.23	391.08	4.8551	296	123.89	522.39	448.78	5.1734
227	184.07	441.57	392.02	4.8610	297	123.36	523.47	449.54	5.1770
228	182.60	442.90	392.96	4.8669	298	122.83	524.54	450.30	5.1806
229	181.17	444.23	393.89	4.8727	299	122.31	525.62	451.06	5.1842
230	179.77	445.54	394.82	4.8784	300	121.79	526.69	451.81	5.1878

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
					91	1157.0	147.55	138.79	2.9149
					92	1152.4	149.23	140.44	2.9333
					93	1147.7	150.92	142.10	2.9516
					94	1143.0	152.62	143.76	2.9697
					95	1138.2	154.32	145.42	2.9877
					96	1133.4	156.03	147.09	3.0056
					97	1128.6	157.75	148.77	3.0234
					98	1123.8	159.47	150.45	3.0410
					99	1119.0	161.19	152.13	3.0585
					100	1114.1	162.92	153.82	3.0759
					101	1109.2	164.65	155.51	3.0931
					102	1104.3	166.38	157.20	3.1102
					103	1099.3	168.12	158.90	3.1271
					104	1094.3	169.85	160.59	3.1439
					105	1089.3	171.59	162.29	3.1605
					106	1084.3	173.33	163.99	3.1770
					107	1079.2	175.07	165.69	3.1934
					108	1074.2	176.82	167.38	3.2096
					109	1069.0	178.56	169.08	3.2256
					110	1063.9	180.30	170.78	3.2416
					111	1058.7	182.04	172.47	3.2573
					112	1053.5	183.78	174.17	3.2729
					113	1048.3	185.52	175.86	3.2884
					114	1043.0	187.26	177.55	3.3037
					115	1037.7	189.00	179.24	3.3189
					116	1032.4	190.74	180.93	3.3340
					117	1027.0	192.48	182.61	3.3489
					118	1021.6	194.21	184.29	3.3636
					119	1016.2	195.95	185.98	3.3783
					120	1010.7	197.68	187.66	3.3928
					121	1005.1	199.42	189.34	3.4072
					122	999.55	201.15	191.01	3.4215
					123	993.92	202.88	192.69	3.4356
					124	988.25	204.62	194.37	3.4497
					125	982.53	206.36	196.04	3.4636
56	1309.0	93.657	85.916	2.1728	126	976.75	208.09	197.72	3.4775
57	1304.6	95.061	87.294	2.1976	127	970.92	209.83	199.40	3.4912
58	1300.2	96.471	88.678	2.2221	128	965.03	211.58	201.08	3.5049
59	1295.9	97.889	90.070	2.2464	129	959.08	213.33	202.76	3.5185
60	1291.5	99.314	91.469	2.2703	130	953.07	215.08	204.45	3.5320
61	1287.2	100.75	92.874	2.2940	131	946.99	216.84	206.14	3.5455
62	1282.8	102.19	94.288	2.3174	132	940.84	218.60	207.83	3.5589
63	1278.5	103.63	95.708	2.3406	133	934.62	220.38	209.54	3.5723
64	1274.2	105.09	97.136	2.3635	134	928.32	222.16	211.25	3.5857
65	1269.8	106.55	98.572	2.3862	135	921.94	223.96	212.97	3.5990
66	1265.5	108.02	100.02	2.4086	136	915.47	225.77	214.70	3.6124
67	1261.2	109.50	101.47	2.4309	137	908.92	227.59	216.44	3.6257
68	1256.9	110.99	102.93	2.4529	138	902.27	229.43	218.20	3.6391
69	1252.6	112.49	104.40	2.4748	139	895.53	231.29	219.97	3 6525
70	1248.3	113.99	105.88	2.4965	140	888.68	233.17	221.76	3.6660
71	1244.0	115.51	107.36	2.5180	141	881.71	235.00	223.50	3.6790
72	1239.7	117.04	108.86	2.5393	142	874.63	236.85	225.26	3.6921
73	1235.4	118.57	110.37	2.5605	143	867.43	238.73	227.05	3.7054
74	1231.1	120.11	111.88	2.5815	144	860.10	240.64	228.86	3.7187
75	1226.8	121.67	113.41	2.6024	145	852.62	242.58	230.70	3.7322
76	1222.5	123.23	114.95	2.6231	146	845.00	244.56	232.57	3.7458
77	1218.2	124.81	116.49	2.6437	147	837.22	246.58	234.48	3.7596
78	1214.0	126.39	118.05	2.6641	148	829.27	248.64	236.42	3.7735
79	1209.7	127.99	119.61	2.6844	149	821.14	250.74	238.40	3.7877
80	1205.4	129.60	121.19	2.7046	150	812.82	252.88	240.41	3.8021
81	1201.2	131.21	122.78	2.7247	151	804.30	255.06	242.47	3.8166
82	1196.9	132.84	124.37	2.7447	152	795.56	257.28	244.55	3.8313
83	1192.7	134.47	125.98	2.7645	153	786.58	259.52	246.64	3.8460
84	1188.4	136.12	127.59	2.7842	154	777.35	261.74	248.70	3.8605
85	1184.2	137.77	129.22	2.8038	155	767.85	263.77	250.58	3.8738
86	1179.9	139.26	130.68	2.8212	156	758.05	266.24	252.87	3.8896
87	1175.4	140.90	132.28	2.8402	157	747.94	268.74	255.20	3.9056
88	1170.8	142.55	133.90	2.8590	158	737.50	271.30	257.56	3.9219
89	1166.3	144.21	135.52	2.8778	159	726.68	273.92	259.97	3.9384
90	1161.7	145.88	137.15	2.8964	160	715.48	276.59	262.43	3.9551

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
161	703.85	279.33	264.93	3.9722	231	201.25	442.58	392.23	4.8424
162	691.77	282.14	267.50	3.9896	232	199.66	443.93	393.18	4.8483
163	679.21	285.03	270.12	4.0074	233	198.11	445.28	394.13	4.8541
164	666.14	288.01	272.80	4.0256	234	196.58	446.61	395.07	4.8598
165	652.54	291.08	275.55	4.0442	235	195.09	447.95	396.01	4.8655
166	638.40	294.24	278.36	4.0633	236	193.63	449.27	396.94	4.8711
167	623.71	297.50	281.25	4.0829	237	192.20	450.58	397.86	4.8767
168	608.49	300.86	284.21	4.1030	238	190.79	451.89	398.78	4.8822
169	592.78	304.32	287.22	4.1235	239	189.42	453.19	399.70	4.8876
170	576.66	307.87	290.30	4.1445	240	188.07	454.49	400.61	4.8930
171	560.24	311.50	293.41	4.1658	241	186.74	455.77	401.51	4.8984
172	543.64	315.19	296.55	4.1873	242	185.44	457.05	402.41	4.9037
173	527.03	318.93	299.70	4.2090	243	184.16	458.33	403.31	4.9090
174	510.58	322.68	302.83	4.2306	244	182.91	459.60	404.20	4.9142
175	494.47	326.42	305.92	4.2520	245	181.68	460.86	405.09	4.9193
176	478.85	330.12	308.96	4.2731	246	180.47	462.12	405.97	4.9245
177	463.84	333.76	311.91	4.2937	247	179.28	463.37	406.85	4.9295
178	449.52	337.32	314.78	4.3138	248	178.11	464.62	407.73	4.9346
179	435.95	340.79	317.55	4.3332	249	176.96	465.86	408.60	4.9396
180	423.15	344.17	320.22	4.3520	250	175.83	467.09	409.47	4.9445
181	411.11	347.43	322.79	4.3701	251	174.72	468.33	410.33	4.9494
182	399.81	350.60	325.25	4.3875	252	173.63	469.55	411.19	4.9543
183	389.21	353.65	327.62	4.4043	253	172.55	470.77	412.05	4.9591
184	379.28	356.61	329.89	4.4204	254	171.49	471.99	412.91	4.9639
185	369.97	359.46	332.08	4.4359	255	170.45	473.20	413.76	4.9687
186	361.24	362.23	334.18	4.4508	256	169.43	474.41	414.61	4.9734
187	353.03	364.91	336.20	4.4651	257	168.42	475.61	415.45	4.9781
188	345.32	367.50	338.16	4.4790	258	167.42	476.81	416.29	4.9828
189	338.05	370.02	340.04	4.4923	259	166.44	478.01	417.13	4.9874
190	331.20	372.46	341.87	4.5052	260	165.48	479.20	417.97	4.9920
191	324.72	374.84	343.63	4.5177	261	164.53	480.39	418.80	4.9966
192	318.59	377.15	345.34	4.5298	262	163.59	481.57	419.64	5.0011
193	312.79	379.40	347.01	4.5415	263	162.67	482.75	420.47	5.0056
194	307.28	381.60	348.62	4.5528	264	161.76	483.93	421.29	5.0101
195	302.03	383.75	350.20	4.5639	265	160.86	485.11	422.12	5.0145
196	297.05	385.84	351.73	4.5746	266	159.98	486.28	422.94	5.0189
197	292.29	387.90	353.23	4.5851	267	159.10	487.44	423.76	5.0233
198	287.75	389.91	354.69	4.5952	268	158.24	488.61	424.57	5.0276
199	283.40	391.88	356.12	4.6051	269	157.39	489.77	425.39	5.0320
200	279.25	393.81	357.52	4.6148	270	156.56	490.92	426.20	5.0363
201	275.26	395.70	358.89	4.6243	271	155.73	492.08	427.01	5.0405
202	271.44	397.57	360.24	4.6335	272	154.91	493.23	427.82	5.0448
203	267.76	399.40	361.56	4.6426	273	154.11	494.38	428.63	5.0490
204	264.23	401.20	362.85	4.6514	274	153.32	495.52	429.43	5.0532
205	260.83	402.97	364.13	4.6601	275	152.53	496.67	430.24	5.0573
206	257.56	404.72	365.38	4.6686	276	151.76	497.81	431.04	5.0615
207	254.40	406.44	366.61	4.6770	277	150.99	498.94	431.84	5.0656
208	251.34	408.14	367.83	4.6851	278	150.24	500.08	432.63	5.0697
209	248.40	409.82	369.02	4.6932	279	149.49	501.21	433.43	5.0737
210	245.55	411.47	370.20	4.7011	280	148.76	502.34	434.22	5.0778
211	242.79	413.10	371.37	4.7088	281	148.03	503.47	435.02	5.0818
212	240.11	414.72	372.52	4.7164	282	147.31	504.59	435.81	5.0858
213	237.52	416.31	373.65	4.7240	283	146.60	505.71	436.60	5.0898
214	235.01	417.89	374.77	4.7313	284	145.90	506.83	437.38	5.0937
215	232.58	419.45	375.88	4.7386	285	145.20	507.95	438.17	5.0976
216	230.21	420.99	376.98	4.7458	286	144.52	509.07	438.95	5.1015
217	227.91	422.52	378.06	4.7528	287	143.84	510.18	439.74	5.1054
218	225.67	424.03	379.13	4.7598	288	143.17	511.29	440.52	5.1093
219	223.50	425.53	380.19	4.7666	289	142.51	512.40	441.30	5.1131
220	221.38	427.01	381.24	4.7734	290	141.85	513.51	442.08	5.1170
221	219.31	428.49	382.28	4.7801	291	141.20	514.62	442.86	5.1208
222	217.30	429.94	383.32	4.7867	292	140.56	515.72	443.63	5.1246
223	215.34	431.39	384.34	4.7932	293	139.93	516.82	444.41	5.1283
224	213.43	432.83	385.35	4.7996	294	139.30	517.92	445.18	5.1321
225	211.57	434.25	386.36	4.8059	295	138.68	519.02	445.96	5.1358
226	209.75	435.66	387.35	4.8122	296	138.07	520.11	446.73	5.1395
227	207.97	437.06	388.34	4.8184	297	137.46	521.21	447.50	5.1432
228	206.23	438.46	389.32	4.8245	298	136.86	522.30	448.27	5.1469
229	204.53	439.84	390.30	4.8305	299	136.27	523.39	449.04	5.1505
230	202.87	441.21	391.27	4.8365	300	135.68	524.48	449.80	5.1542

120.00 ATMOSPHERE ISOBAR

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
					91	1161.0	148.67	138.19	2.9080
					92	1156.4	150.34	139.83	2.9262
					93	1151.8	152.02	141.47	2.9444
					94	1147.2	153.71	143.11	2.9625
					95	1142.5	155.40	144.76	2.9804
					96	1137.8	157.10	146.42	2.9982
					97	1133.1	158.81	148.08	3.0158
					98	1128.4	160.52	149.74	3.0334
					99	1123.6	162.23	151.41	3.0508
					100	1118.8	163.94	153.08	3.0680
					101	1114.0	165.66	154.75	3.0851
					102	1109.2	167.39	156.42	3.1021
					103	1104.4	169.11	158.10	3.1189
					104	1099.5	170.84	159.78	3.1356
					105	1094.6	172.56	161.46	3.1521
					106	1089.7	174.29	163.13	3.1685
					107	1084.8	176.02	164.81	3.1847
					108	1079.8	177.75	166.49	3.2008
					109	1074.8	179.48	168.16	3.2167
					110	1069.8	181.20	169.84	3.2325
					111	1064.8	182.93	171.51	3.2481
					112	1059.8	184.66	173.18	3.2636
					113	1054.7	186.38	174.85	3.2789
					114	1049.6	188.10	176.52	3.2941
					115	1044.4	189.82	178.18	3.3091
					116	1039.3	191.54	179.84	3.3240
					117	1034.1	193.26	181.50	3.3388
					118	1028.8	194.98	183.16	3.3534
					119	1023.6	196.69	184.81	3.3678
					120	1018.3	198.40	186.46	3.3822
					121	1013.0	200.11	188.11	3.3964
					122	1007.6	201.82	189.75	3.4104
					123	1002.2	203.53	191.40	3.4244
					124	996.76	205.24	193.04	3.4382
					125	991.28	206.95	194.68	3.4519
56	1311.1	94.917	85.643	2.1676	126	985.76	208.66	196.32	3.4655
57	1306.8	96.319	87.015	2.1925	127	980.20	210.36	197.96	3.4790
58	1302.5	97.728	88.393	2.2170	128	974.58	212.08	199.60	3.4925
59	1298.2	99.144	89.778	2.2412	129	968.93	213.79	201.24	3.5058
60	1293.9	100.57	91.170	2.2651	130	963.22	215.50	202.88	3.5190
61	1289.6	102.00	92.570	2.2887	131	957.46	217.22	204.53	3.5322
62	1285.4	103.44	93.976	2.3121	132	951.65	218.95	206.17	3.5453
63	1281.1	104.88	95.390	2.3352	133	945.78	220.68	207.82	3.5584
64	1276.8	106.33	96.811	2.3581	134	939.85	222.42	209.48	3.5714
65	1272.5	107.80	98.240	2.3808	135	933.86	224.17	211.15	3.5844
66	1268.3	109.26	99.678	2.4032	136	927.81	225.92	212.82	3.5974
67	1264.0	110.74	101.12	2.4254	137	921.69	227.69	214.50	3.6103
68	1259.7	112.23	102.58	2.4475	138	915.50	229.47	216.19	3.6233
69	1255.5	113.72	104.04	2.4693	139	909.24	231.27	217.90	3.6363
70	1251.2	115.23	105.51	2.4909	140	902.90	233.08	219.62	3.6493
71	1247.0	116.74	106.99	2.5124	141	896.49	234.84	221.28	3.6618
72	1242.8	118.26	108.48	2.5337	142	889.98	236.62	222.96	3.6744
73	1238.5	119.80	109.98	2.5548	143	883.40	238.42	224.66	3.6870
74	1234.3	121.34	111.49	2.5758	144	876.72	240.25	226.38	3.6998
75	1230.1	122.89	113.01	2.5966	145	869.94	242.10	228.12	3.7126
76	1225.8	124.45	114.53	2.6173	146	863.07	243.98	229.89	3.7255
77	1221.6	126.02	116.07	2.6379	147	856.08	245.89	231.69	3.7386
78	1217.4	127.61	117.62	2.6583	148	848.99	247.83	233.51	3.7518
79	1213.2	129.20	119.18	2.6786	149	841.78	249.81	235.36	3.7651
80	1209.0	130.80	120.75	2.6988	150	834.45	251.81	237.24	3.7786
81	1204.8	132.42	122.32	2.7188	151	826.99	253.85	239.15	3.7921
82	1200.6	134.04	123.91	2.7387	152	819.40	255.91	241.07	3.8058
83	1196.4	135.67	125.51	2.7585	153	811.66	257.98	243.00	3.8194
84	1192.2	137.31	127.12	2.7782	154	803.78	260.01	244.88	3.8326
85	1188.0	138.97	128.73	2.7977	155	795.74	261.84	246.56	3.8446
86	1183.5	140.42	130.15	2.8148	156	787.53	264.07	248.63	3.8589
87	1179.0	142.05	131.74	2.8336	157	779.15	266.33	250.73	3.8734
88	1174.6	143.69	133.34	2.8524	158	770.59	268.62	252.84	3.8879
89	1170.1	145.34	134.95	2.8710	159	761.84	270.93	254.97	3.9025
90	1165.5	147.00	136.57	2.8896	160	752.88	273.28	257.13	3.9172

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
161	743.72	275.65	259.30	3.9320	231	247.84	434.26	385.20	4.7672
162	734.35	278.06	261.50	3.9469	232	245.73	435.71	386.23	4.7735
163	724.74	280.51	263.73	3.9620	233	243.67	437.16	387.26	4.7797
164	714.90	282.99	265.98	3.9771	234	241.65	438.60	388.28	4.7859
165	704.82	285.51	268.26	3.9925	235	239.68	440.02	389.29	4.7920
166	694.49	288.08	270.57	4.0080	236	237.75	441.44	390.30	4.7980
167	683.91	290.68	272.91	4.0236	237	235.86	442.85	391.30	4.8039
168	673.08	293.34	275.27	4.0395	238	234.01	444.25	392.29	4.8098
169	662.00	296.03	277.67	4.0555	239	232.20	445.64	393.27	4.8156
170	650.67	298.78	280.09	4.0717	240	230.42	447.02	394.25	4.8214
171	639.11	301.57	282.54	4.0880	241	228.68	448.39	395.22	4.8271
172	627.33	304.40	285.02	4.1046	242	226.98	449.75	396.18	4.8328
173	615.36	307.28	287.52	4.1212	243	225.31	451.11	397.14	4.8384
174	603.23	310.20	290.04	4.1381	244	223.67	452.46	398.10	4.8439
175	590.97	313.15	292.57	4.1550	245	222.06	453.80	399.04	4.8494
176	578.64	316.13	295.12	4.1720	246	220.49	455.13	399.98	4.8548
177	566.28	319.13	297.66	4.1890	247	218.94	456.46	400.92	4.8602
178	553.94	322.15	300.20	4.2060	248	217.42	457.78	401.85	4.8655
179	541.69	325.18	302.73	4.2229	249	215.93	459.09	402.78	4.8708
180	529.58	328.20	305.24	4.2398	250	214.47	460.40	403.70	4.8760
181	517.66	331.22	307.73	4.2565	251	213.03	461.70	404.62	4.8812
182	505.98	334.21	310.18	4.2730	252	211.61	462.99	405.53	4.8864
183	494.58	337.18	312.60	4.2893	253	210.22	464.28	406.44	4.8915
184	483.50	340.12	314.97	4.3053	254	208.86	465.56	407.35	4.8965
185	472.77	343.02	317.30	4.3210	255	207.51	466.84	408.25	4.9016
186	462.41	345.87	319.58	4.3364	256	206.19	468.11	409.14	4.9065
187	452.42	348.68	321.80	4.3514	257	204.89	469.38	410.04	4.9115
188	442.81	351.44	323.98	4.3661	258	203.62	470.64	410.92	4.9164
189	433.59	354.14	326.10	4.3805	259	202.36	471.90	411.81	4.9212
190	424.75	356.79	328.17	4.3945	260	201.12	473.15	412.69	4.9261
191	416.28	359.39	330.18	4.4081	261	199.90	474.39	413.57	4.9308
192	408.16	361.94	332.15	4.4214	262	198.70	475.63	414.44	4.9356
193	400.40	364.43	334.06	4.4344	263	197.52	476.87	415.31	4.9403
194	392.96	366.87	335.93	4.4470	264	196.36	478.10	416.18	4.9450
195	385.85	369.27	337.75	4.4593	265	195.21	479.33	417.05	4.9496
196	379.04	371.61	339.53	4.4713	266	194.08	480.56	417.91	4.9542
197	372.52	373.91	341.27	4.4830	267	192.97	481.78	418.77	4.9588
198	366.27	376.16	342.96	4.4944	268	191.88	482.99	419.62	4.9634
199	360.28	378.37	344.62	4.5055	269	190.80	484.20	420.47	4.9679
200	354.53	380.54	346.24	4.5163	270	189.73	485.41	421.32	4.9723
201	349.02	382.66	347.82	4.5270	271	188.68	486.61	422.17	4.9768
202	343.72	384.75	349.38	4.5373	272	187.65	487.81	423.02	4.9812
203	338.63	386.80	350.90	4.5475	273	186.63	489.01	423.86	4.9856
204	333.74	388.82	352.39	4.5574	274	185.62	490.20	424.70	4.9900
205	329.03	390.80	353.85	4.5671	275	184.62	491.39	425.54	4.9943
206	324.49	392.75	355.28	4.5766	276	183.64	492.58	426.37	4.9986
207	320.12	394.67	356.69	4.5859	277	182.68	493.76	427.20	5.0029
208	315.91	396.57	358.08	4.5950	278	181.72	494.94	428.03	5.0071
209	311.84	398.43	359.44	4.6039	279	180.78	496.12	428.86	5.0114
210	307.91	400.26	360.78	4.6127	280	179.85	497.29	429.69	5.0156
211	304.11	402.08	362.09	4.6213	281	178.93	498.46	430.51	5.0197
212	300.44	403.86	363.39	4.6297	282	178.03	499.63	431.33	5.0239
213	296.88	405.62	364.67	4.6380	283	177.13	500.79	432.15	5.0280
214	293.44	407.36	365.93	4.6462	284	176.25	501.96	432.97	5.0321
215	290.11	409.08	367.17	4.6542	285	175.38	503.11	433.78	5.0362
216	286.87	410.78	368.40	4.6621	286	174.52	504.27	434.60	5.0402
217	283.74	412.46	369.61	4.6698	287	173.66	505.42	435.41	5.0442
218	280.69	414.12	370.80	4.6774	288	172.82	506.58	436.22	5.0483
219	277.74	415.76	371.98	4.6849	289	171.99	507.72	437.03	5.0522
220	274.86	417.38	373.15	4.6923	290	171.17	508.87	437.83	5.0562
221	272.07	418.99	374.30	4.6996	291	170.36	510.01	438.64	5.0601
222	269.36	420.58	375.44	4.7068	292	169.56	511.15	439.44	5.0640
223	266.71	422.15	376.57	4.7139	293	168.76	512.29	440.24	5.0679
224	264.14	423.71	377.68	4.7209	294	167.98	513.43	441.04	5.0718
225	261.63	425.26	378.79	4.7277	295	167.20	514.56	441.84	5.0757
226	259.19	426.79	379.88	4.7345	296	166.44	515.69	442.64	5.0795
227	256.81	428.31	380.96	4.7412	297	165.68	516.82	443.43	5.0833
228	254.48	429.81	382.03	4.7479	298	164.93	517.95	444.23	5.0871
229	252.22	431.31	383.10	4.7544	299	164.19	519.08	445.02	5.0908
230	250.00	432.79	384.15	4.7608	300	163.46	520.20	445.81	5.0946

140.00 ATMOSPHERE ISOBAR

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
					91	1164.8	149.79	137.61	2.9012
					92	1160.3	151.46	139.23	2.9194
					93	1155.8	153.13	140.86	2.9374
					94	1151.2	154.81	142.49	2.9554
					95	1146.6	156.49	144.12	2.9732
					96	1142.0	158.18	145.76	2.9909
					97	1137.4	159.88	147.41	3.0085
					98	1132.8	161.58	149.05	3.0259
					99	1128.1	163.28	150.71	3.0432
					100	1123.4	164.99	152.36	3.0604
					101	1118.7	166.70	154.02	3.0774
					102	1114.0	168.41	155.68	3.0942
					103	1109.2	170.12	157.33	3.1110
					104	1104.5	171.84	158.99	3.1275
					105	1099.7	173.55	160.65	3.1440
					106	1094.9	175.27	162.31	3.1602
					107	1090.1	176.99	163.97	3.1763
					108	1085.2	178.70	165.63	3.1923
					109	1080.4	180.42	167.29	3.2081
					110	1075.5	182.13	168.94	3.2238
					111	1070.6	183.85	170.60	3.2393
					112	1065.7	185.56	172.25	3.2546
					113	1060.7	187.27	173.89	3.2698
					114	1055.8	188.98	175.54	3.2849
					115	1050.8	190.68	177.18	3.2998
					116	1045.8	192.38	178.82	3.3145
					117	1040.7	194.08	180.45	3.3291
					118	1035.7	195.78	182.08	3.3436
					119	1030.6	197.48	183.71	3.3579
					120	1025.5	199.17	185.34	3.3720
					121	1020.3	200.86	186.96	3.3861
					122	1015.1	202.55	188.58	3.4000
					123	1009.9	204.24	190.19	3.4137
					124	1004.7	205.92	191.80	3.4274
					125	999.44	207.60	193.41	3.4409
56	1313.3	96.180	85.378	2.1626	126	994.13	209.29	195.02	3.4543
57	1309.0	97.580	86.743	2.1874	127	988.80	210.97	196.62	3.4676
58	1304.8	98.987	88.116	2.2119	128	983.42	212.65	198.23	3.4808
59	1300.6	100.40	89.495	2.2361	129	978.01	214.34	199.83	3.4939
60	1296.3	101.82	90.880	2.2599	130	972.56	216.02	201.44	3.5069
61	1292.1	103.25	92.273	2.2836	131	967.07	217.71	203.04	3.5199
62	1287.9	104.69	93.673	2.3069	132	961.53	219.40	204.65	3.5327
63	1283.7	106.13	95.081	2.3300	133	955.95	221.10	206.26	3.5455
64	1279.4	107.58	96.496	2.3529	134	950.33	222.80	207.87	3.5583
65	1275.2	109.04	97.918	2.3755	135	944.66	224.51	209.49	3.5710
66	1271.0	110.51	99.349	2.3979	136	938.94	226.23	211.12	3.5836
67	1266.8	111.99	100.79	2.4201	137	933.17	227.95	212.75	3.5963
68	1262.6	113.47	102.23	2.4421	138	927.34	229.69	214.39	3.6089
69	1258.4	114.96	103.69	2.4639	139	921.46	231.44	216.04	3.6215
70	1254.2	116.46	105.15	2.4855	140	915.53	233.20	217.70	3.6342
71	1250.0	117.98	106.63	2.5069	141	909.53	234.90	219.31	3.6463
72	1245.9	119.50	108.11	2.5282	142	903.47	236.62	220.92	3.6585
73	1241.7	121.03	109.60	2.5493	143	897.35	238.37	222.56	3.6707
74	1237.5	122.57	111.10	2.5702	144	891.16	240.13	224.21	3.6830
75	1233.3	124.12	112.61	2.5910	145	884.90	241.91	225.88	3.6953
76	1229.2	125.68	114.13	2.6117	146	878.57	243.72	227.57	3.7078
77	1225.0	127.24	115.66	2.6322	147	872.17	245.55	229.29	3.7203
78	1220.9	128.82	117.21	2.6526	148	865.68	247.41	231.02	3.7330
79	1216.7	130.41	118.76	2.6729	149	859.12	249.30	232.79	3.7457
80	1212.6	132.01	120.32	2.6930	150	852.47	251.21	234.57	3.7586
81	1208.4	133.63	121.89	2.7130	151	845.73	253.15	236.38	3.7715
82	1204.3	135.25	123.47	2.7329	152	838.90	255.11	238.20	3.7844
83	1200.1	136.88	125.06	2.7526	153	831.98	257.06	240.01	3.7973
84	1196.0	138.52	126.65	2.7723	154	824.96	258.97	241.78	3.8097
85	1191.9	140.16	128.26	2.7918	155	817.84	260.67	243.33	3.8208
86	1187.0	141.59	129.64	2.8085	156	810.61	262.77	245.27	3.8343
87	1182.6	143.21	131.22	2.8272	157	803.27	264.88	247.22	3.8478
88	1178.2	144.84	132.80	2.8459	158	795.82	267.01	249.18	3.8613
89	1173.8	146.49	134.40	2.8644	159	788.25	269.15	251.16	3.8749
90	1169.3	148.13	136.00	2.8828	160	780.57	271.31	253.14	3.8884

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
161	772.75	273.49	255.13	3.9020	231	294.60	426.44	378.29	4.7010
162	764.81	275.69	257.14	3.9156	232	291.96	427.99	379.41	4.7077
163	756.74	277.91	259.16	3.9292	233	289.39	429.53	380.51	4.7143
164	748.53	280.15	261.19	3.9429	234	286.88	431.05	381.60	4.7208
165	740.18	282.41	263.24	3.9567	235	284.42	432.56	382.69	4.7272
166	731.69	284.69	265.30	3.9705	236	282.02	434.06	383.76	4.7336
167	723.07	287.00	267.38	3.9843	237	279.67	435.55	384.83	4.7399
168	714.30	289.33	269.47	3.9983	238	277.37	437.03	385.89	4.7461
169	705.38	291.69	271.58	4.0122	239	275.12	438.50	386.94	4.7523
170	696.33	294.07	273.70	4.0263	240	272.92	439.96	387.98	4.7584
171	687.14	296.47	275.83	4.0404	241	270.77	441.41	389.02	4.7644
172	677.81	298.91	277.98	4.0546	242	268.65	442.85	390.04	4.7704
173	668.36	301.37	280.14	4.0688	243	266.58	444.28	391.06	4.7763
174	658.78	303.85	282.32	4.0832	244	264.56	445.70	392.08	4.7821
175	649.10	306.36	284.50	4.0975	245	262.57	447.11	393.08	4.7879
176	639.32	308.89	286.70	4.1119	246	260.62	448.51	394.08	4.7936
177	629.45	311.44	288.90	4.1264	247	258.71	449.91	395.07	4.7992
178	619.52	314.01	291.11	4.1409	248	256.83	451.29	396.06	4.8048
179	609.54	316.60	293.33	4.1554	249	254.99	452.67	397.04	4.8104
180	599.54	319.20	295.54	4.1699	250	253.18	454.05	398.02	4.8159
181	589.53	321.81	297.75	4.1844	251	251.41	455.41	398.99	4.8213
182	579.54	324.44	299.96	4.1988	252	249.67	456.77	399.95	4.8267
183	569.60	327.06	302.16	4.2132	253	247.96	458.12	400.91	4.8321
184	559.73	329.69	304.35	4.2275	254	246.27	459.46	401.86	4.8374
185	549.96	332.31	306.52	4.2417	255	244.62	460.80	402.81	4.8426
186	540.30	334.93	308.68	4.2559	256	243.00	462.13	403.75	4.8479
187	530.79	337.54	310.81	4.2698	257	241.41	463.45	404.69	4.8530
188	521.44	340.13	312.93	4.2837	258	239.84	464.77	405.63	4.8581
189	512.26	342.71	315.02	4.2973	259	238.29	466.08	406.56	4.8632
190	503.28	345.26	317.08	4.3108	260	236.78	467.39	407.48	4.8682
191	494.51	347.79	319.11	4.3241	261	235.28	468.69	408.40	4.8732
192	485.96	350.30	321.11	4.3372	262	233.82	469.99	409.32	4.8782
193	477.62	352.78	323.08	4.3501	263	232.37	471.28	410.23	4.8831
194	469.52	355.23	325.02	4.3627	264	230.95	472.56	411.14	4.8880
195	461.65	357.65	326.92	4.3752	265	229.55	473.84	412.04	4.8928
196	454.02	360.04	328.79	4.3874	266	228.17	475.11	412.94	4.8976
197	446.61	362.39	330.63	4.3994	267	226.81	476.38	413.84	4.9024
198	439.44	364.72	332.44	4.4111	268	225.48	477.65	414.73	4.9071
199	432.50	367.01	334.21	4.4227	269	224.16	478.91	415.62	4.9118
200	425.77	369.27	335.95	4.4340	270	222.86	480.16	416.51	4.9165
201	419.27	371.49	337.66	4.4451	271	221.58	481.41	417.40	4.9211
202	412.97	373.69	339.34	4.4560	272	220.32	482.66	418.28	4.9257
203	406.88	375.85	340.99	4.4667	273	219.08	483.90	419.15	4.9302
204	400.99	377.98	342.61	4.4772	274	217.86	485.14	420.03	4.9348
205	395.29	380.08	344.20	4.4874	275	216.65	486.37	420.90	4.9392
206	389.78	382.16	345.76	4.4975	276	215.46	487.60	421.77	4.9437
207	384.44	384.20	347.30	4.5074	277	214.29	488.83	422.63	4.9481
208	379.28	386.21	348.81	4.5171	278	213.13	490.05	423.49	4.9526
209	374.27	388.20	350.30	4.5266	279	211.99	491.27	424.35	4.9569
210	369.43	390.16	351.76	4.5360	280	210.86	492.49	425.21	4.9613
211	364.74	392.09	353.20	4.5452	281	209.75	493.70	426.06	4.9656
212	360.19	394.00	354.62	4.5542	282	208.65	494.90	426.92	4.9699
213	355.78	395.89	356.01	4.5631	283	207.57	496.11	427.77	4.9741
214	351.51	397.75	357.39	4.5718	284	206.50	497.31	428.61	4.9784
215	347.36	399.59	358.75	4.5804	285	205.44	498.51	429.46	4.9826
216	343.33	401.40	360.08	4.5888	286	204.40	499.70	430.30	4.9868
217	339.42	403.20	361.40	4.5971	287	203.37	500.89	431.14	4.9909
218	335.62	404.97	362.70	4.6052	288	202.36	502.08	431.98	4.9951
219	331.93	406.72	363.99	4.6133	289	201.35	503.26	432.81	4.9992
220	328.35	408.46	365.26	4.6212	290	200.36	504.45	433.65	5.0032
221	324.86	410.18	366.51	4.6290	291	199.38	505.63	434.48	5.0073
222	321.47	411.87	367.75	4.6366	292	198.42	506.80	435.31	5.0113
223	318.16	413.56	368.97	4.6442	293	197.46	507.98	436.14	5.0154
224	314.95	415.22	370.18	4.6516	294	196.52	509.15	436.96	5.0193
225	311.81	416.87	371.37	4.6590	295	195.58	510.31	437.78	5.0233
226	308.76	418.50	372.56	4.6662	296	194.66	511.48	438.61	5.0273
227	305.79	420.12	373.73	4.6733	297	193.75	512.64	439.43	5.0312
228	302.88	421.72	374.89	4.6804	298	192.85	513.80	440.24	5.0351
229	300.05	423.31	376.03	4.6873	299	191.96	514.96	441.06	5.0390
230	297.29	424.88	377.17	4.6942	300	191.08	516.12	441.88	5.0428

160.00 ATMOSPHERE ISOBAR

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
					91	1168.6	150.92	137.05	2.8945
					92	1164.1	152.58	138.65	2.9126
					93	1159.6	154.25	140.26	2.9306
					94	1155.2	155.92	141.88	2.9485
					95	1150.6	157.59	143.50	2.9662
					96	1146.1	159.27	145.13	2.9838
					97	1141.6	160.96	146.76	3.0013
					98	1137.0	162.65	148.39	3.0187
					99	1132.4	164.35	150.03	3.0359
					100	1127.8	166.04	151.67	3.0529
					101	1123.2	167.74	153.31	3.0698
					102	1118.6	169.45	154.95	3.0866
					103	1113.9	171.15	156.60	3.1032
					104	1109.3	172.86	158.24	3.1197
					105	1104.6	174.56	159.89	3.1361
					106	1099.9	176.27	161.53	3.1522
					107	1095.2	177.98	163.17	3.1682
					108	1090.4	179.68	164.81	3.1841
					109	1085.7	181.38	166.45	3.1998
					110	1080.9	183.09	168.09	3.2154
					111	1076.2	184.79	169.72	3.2308
					112	1071.4	186.49	171.35	3.2460
					113	1066.5	188.18	172.98	3.2611
					114	1061.7	189.88	174.61	3.2760
					115	1056.8	191.57	176.23	3.2908
					116	1052.0	193.26	177.85	3.3054
					117	1047.1	194.94	179.46	3.3198
					118	1042.2	196.62	181.07	3.3342
					119	1037.2	198.30	182.67	3.3483
					120	1032.3	199.98	184.27	3.3624
					121	1027.3	201.65	185.87	3.3762
					122	1022.3	203.32	187.46	3.3900
					123	1017.2	204.99	189.05	3.4036
					124	1012.2	206.66	190.64	3.4171
					125	1007.1	208.32	192.22	3.4304
					126	1002.0	209.98	193.80	3.4437
					127	996.83	211.64	195.38	3.4568
					128	991.66	213.30	196.95	3.4698
					129	986.46	214.96	198.52	3.4827
					130	981.22	216.62	200.10	3.4956
					131	975.96	218.28	201.67	3.5083
					132	970.66	219.94	203.24	3.5209
					133	965.33	221.61	204.82	3.5335
					134	959.96	223.28	206.39	3.5460
					135	954.55	224.96	207.97	3.5585
					136	949.11	226.64	209.56	3.5709
					137	943.62	228.33	211.15	3.5833
					138	938.10	230.03	212.75	3.5956
					139	932.53	231.74	214.35	3.6080
					140	926.92	233.46	215.97	3.6203
					141	921.26	235.12	217.52	3.6322
					142	915.55	236.80	219.09	3.6440
					143	909.80	238.49	220.67	3.6559
					144	904.00	240.20	222.27	3.6678
					145	898.14	241.93	223.88	3.6798
					146	892.23	243.69	225.52	3.6919
					147	886.26	245.46	227.17	3.7040
					148	880.24	247.26	228.84	3.7163
					149	874.16	249.09	230.54	3.7286
					150	868.02	250.93	232.26	3.7410
					151	861.81	252.80	233.99	3.7534
					152	855.54	254.68	235.73	3.7659
					153	849.20	256.55	237.46	3.7782
					154	842.79	258.38	239.14	3.7901
					155	836.32	259.99	240.60	3.8006
86	1191.7	143.03	129.42	2.8053	156	829.76	261.99	242.45	3.8135
87	1186.1	144.38	130.71	2.8209	157	823.14	264.00	244.31	3.8264
88	1181.7	146.00	132.28	2.8395	158	816.44	266.02	246.17	3.8392
89	1177.4	147.63	133.86	2.8580	159	809.65	268.05	248.03	3.8520
90	1173.0	149.27	135.45	2.8763	160	802.79	270.10	249.90	3.8648

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
161	795.85	272.15	251.78	3.8776	231	340.21	419.33	371.68	4.6425
162	788.82	274.21	253.66	3.8904	232	337.11	420.95	372.86	4.6495
163	781.71	276.29	255.55	3.9032	233	334.08	422.55	374.03	4.6564
164	774.50	278.38	257.45	3.9159	234	331.12	424.15	375.19	4.6632
165	767.22	280.48	259.35	3.9287	235	328.22	425.73	376.33	4.6700
166	759.84	282.60	261.26	3.9415	236	325.39	427.29	377.47	4.6766
167	752.37	284.73	263.18	3.9543	237	322.62	428.85	378.60	4.6832
168	744.81	286.88	265.11	3.9671	238	319.91	430.39	379.72	4.6897
169	737.16	289.04	267.05	3.9800	239	317.25	431.93	380.83	4.6961
170	729.43	291.22	268.99	3.9928	240	314.65	433.45	381.93	4.7025
171	721.60	293.41	270.94	4.0057	241	312.11	434.96	383.02	4.7088
172	713.69	295.62	272.90	4.0185	242	309.61	436.46	384.10	4.7150
173	705.69	297.84	274.87	4.0314	243	307.17	437.96	385.18	4.7211
174	697.62	300.08	276.84	4.0443	244	304.77	439.44	386.24	4.7272
175	689.46	302.34	278.82	4.0573	245	302.42	440.91	387.30	4.7332
176	681.24	304.61	280.81	4.0702	246	300.12	442.37	388.35	4.7392
177	672.95	306.89	282.80	4.0832	247	297.86	443.83	389.40	4.7451
178	664.60	309.19	284.80	4.0961	248	295.65	445.27	390.44	4.7509
179	656.20	311.50	286.80	4.1091	249	293.47	446.71	391.47	4.7567
180	647.75	313.83	288.80	4.1270	250	291.34	448.14	392.49	4.7624
181	639.27	316.17	290.81	4.1350	251	289.24	449.56	393.51	4.7681
182	630.77	318.51	292.81	4.1479	252	287.19	450.97	394.52	4.7737
183	622.26	320.87	294.82	4.1608	253	285.17	452.37	395.52	4.7793
184	613.74	323.23	296.82	4.1737	254	283.18	453.77	396.52	4.7848
185	605.24	325.60	298.82	4.1865	255	281.24	455.16	397.51	4.7903
186	596.76	327.97	300.81	4.1993	256	279.32	456.54	398.50	4.7957
187	588.33	330.35	302.79	4.2120	257	277.44	457.92	399.48	4.8010
188	579.94	332.72	304.77	4.2247	258	275.59	459.29	400.46	4.8064
189	571.62	335.09	306.73	4.2373	259	273.77	460.65	401.43	4.8116
190	563.38	337.46	308.68	4.2498	260	271.98	462.00	402.40	4.8168
191	555.23	339.82	310.62	4.2622	261	270.22	463.35	403.36	4.8220
192	547.17	342.17	312.54	4.2745	262	268.49	464.70	404.31	4.8272
193	539.23	344.51	314.45	4.2866	263	266.79	466.03	405.27	4.8323
194	531.41	346.84	316.34	4.2987	264	265.11	467.36	406.21	4.8373
195	523.72	349.16	318.21	4.3106	265	263.47	468.69	407.16	4.8423
196	516.17	351.46	320.05	4.3223	266	261.84	470.01	408.09	4.8473
197	508.76	353.75	321.88	4.3340	267	260.24	471.32	409.03	4.8522
198	501.50	356.02	323.69	4.3455	268	258.67	472.63	409.96	4.8571
199	494.39	358.26	325.47	4.3568	269	257.12	473.94	410.88	4.8620
200	487.43	360.49	327.23	4.3680	270	255.60	475.23	411.81	4.8668
201	480.63	362.70	328.97	4.3790	271	254.09	476.53	412.72	4.8716
202	474.00	364.89	330.69	4.3898	272	252.61	477.82	413.64	4.8763
203	467.52	367.06	332.38	4.4005	273	251.15	479.10	414.55	4.8810
204	461.20	369.20	334.05	4.4111	274	249.71	480.38	415.46	4.8857
205	455.03	371.32	335.69	4.4214	275	248.30	481.65	416.36	4.8903
206	449.03	373.42	337.32	4.4317	276	246.90	482.92	417.26	4.8949
207	443.17	375.50	338.92	4.4417	277	245.52	484.19	418.16	4.8995
208	437.47	377.55	340.49	4.4516	278	244.16	485.45	419.05	4.9041
209	431.92	379.59	342.05	4.4614	279	242.82	486.70	419.94	4.9086
210	426.51	381.60	343.59	4.4710	280	241.50	487.96	420.83	4.9131
211	421.25	383.58	345.10	4.4804	281	240.20	489.21	421.71	4.9175
212	416.12	385.55	346.59	4.4897	282	238.91	490.45	422.59	4.9219
213	411.13	387.50	348.06	4.4989	283	237.64	491.69	423.47	4.9263
214	406.27	389.42	349.52	4.5079	284	236.39	492.93	424.35	4.9307
215	401.53	391.33	350.95	4.5168	285	235.15	494.16	425.22	4.9350
216	396.92	393.21	352.37	4.5255	286	233.93	495.39	426.09	4.9393
217	392.43	395.07	353.76	4.5341	287	232.73	496.62	426.96	4.9436
218	388.06	396.92	355.14	4.5426	288	231.54	497.84	427.82	4.9479
219	383.80	398.74	356.50	4.5509	289	230.37	499.06	428.68	4.9521
220	379.65	400.55	357.85	4.5592	290	229.21	500.27	429.54	4.9563
221	375.60	402.34	359.18	4.5673	291	228.06	501.48	430.40	4.9605
222	371.66	404.11	360.49	4.5753	292	226.93	502.69	431.25	4.9646
223	367.81	405.87	361.79	4.5832	293	225.82	503.90	432.11	4.9687
224	364.06	407.60	363.07	4.5909	294	224.72	505.10	432.96	4.9728
225	360.40	409.32	364.34	4.5986	295	223.63	506.30	433.81	4.9769
226	356.83	411.03	365.60	4.6062	296	222.55	507.50	434.65	4.9809
227	353.34	412.72	366.84	4.6136	297	221.48	508.69	435.50	4.9850
228	349.94	414.39	368.07	4.6210	298	220.43	509.88	436.34	4.9890
229	346.62	416.05	369.28	4.6283	299	219.39	511.07	437.18	4.9930
230	343.38	417.70	370.49	4.6354	300	218.37	512.26	438.01	4.9969

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
					91	1172.2	152.06	136.50	2.8880
					92	1167.8	153.71	138.1C	2.9060
					93	1163.4	155.37	139.69	2.9239
					94	1159.0	157.03	141.30	2.9417
					95	1154.6	158.70	142.90	2.9594
					96	1150.1	160.37	144.52	2.9769
					97	1145.6	162.05	146.13	2.9943
					98	1141.1	163.74	147.75	3.0116
					99	1136.6	165.42	149.38	3.0287
					100	1132.1	167.11	151.00	3.0457
					101	1127.6	168.80	152.63	3.0625
					102	1123.0	170.50	154.26	3.0792
					103	1118.5	172.19	155.89	3.0957
					104	1113.9	173.89	157.52	3.1121
					105	1109.3	175.59	159.15	3.1284
					106	1104.7	177.28	160.77	3.1445
					107	1100.1	178.98	162.40	3.1604
					108	1095.5	180.68	164.03	3.1762
					109	1090.8	182.37	165.65	3.1918
					110	1086.2	184.06	167.27	3.2072
					111	1081.5	185.75	168.89	3.2225
					112	1076.8	187.44	170.50	3.2376
					113	1072.1	189.12	172.11	3.2526
					114	1067.4	190.81	173.72	3.2674
					115	1062.6	192.48	175.32	3.2821
					116	1057.9	194.16	176.92	3.2966
					117	1053.1	195.83	178.51	3.3110
					118	1048.3	197.50	180.10	3.3251
					119	1043.5	199.16	181.69	3.3392
					120	1038.7	200.82	183.27	3.3531
					121	1033.9	202.48	184.84	3.3668
					122	1029.0	204.14	186.41	3.3805
					123	1024.1	205.79	187.98	3.3939
					124	1019.2	207.43	189.54	3.4073
					125	1014.3	209.08	191.10	3.4205
					126	1009.3	210.72	192.65	3.4336
					127	1004.4	212.36	194.20	3.4466
					128	999.38	214.00	195.75	3.4594
					129	994.36	215.64	197.30	3.4722
					130	989.32	217.28	198.84	3.4848
					131	984.25	218.92	200.39	3.4974
					132	979.16	220.56	201.93	3.5098
					133	974.04	222.20	203.47	3.5222
					134	968.89	223.84	205.02	3.5345
					135	963.70	225.49	206.57	3.5468
					136	958.49	227.15	208.12	3.5590
					137	953.25	228.81	209.67	3.5712
					138	947.98	230.47	211.24	3.5833
					139	942.67	232.15	212.80	3.5954
					140	937.32	233.84	214.38	3.6075
					141	931.94	235.47	215.90	3.6191
					142	926.53	237.11	217.42	3.6307
					143	921.08	238.76	218.96	3.6423
					144	915.58	240.43	220.51	3.6540
					145	910.05	242.12	222.08	3.6657
					146	904.48	243.83	223.67	3.6774
					147	898.86	245.56	225.27	3.6893
					148	893.21	247.31	226.89	3.7012
					149	887.50	249.08	228.53	3.7131
					150	881.75	250.88	230.20	3.7252
					151	875.96	252.69	231.87	3.7373
					152	870.12	254.51	233.55	3.7493
					153	864.22	256.32	235.22	3.7612
					154	858.28	258.09	236.84	3.7728
					155	852.28	259.63	238.23	3.7828
86	1195.6	144.23	128.98	2.7996	156	846.24	261.56	240.01	3.7953
87	1189.4	145.55	130.21	2.8148	157	840.14	263.50	241.79	3.8077
88	1185.2	147.16	131.77	2.8333	158	833.98	265.45	243.58	3.8200
89	1180.9	148.79	133.34	2.8516	159	827.77	267.40	245.36	3.8323
90	1176.5	150.42	134.92	2.8699	160	821.50	269.35	247.15	3.8446

TEMPER- ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER- ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
161	815.17	271.32	248.94	3.8568	231	383.52	413.04	365.48	4.5910
162	808.79	273.29	250.74	3.8690	232	380.05	414.70	366.71	4.5982
163	802.34	275.27	252.54	3.8812	233	376.66	416.35	367.93	4.6053
164	795.84	277.26	254.34	3.8934	234	373.34	417.99	369.14	4.6123
165	789.27	279.25	256.14	3.9055	235	370.08	419.62	370.34	4.6193
166	782.64	281.26	257.95	3.9176	236	366.90	421.24	371.53	4.6261
167	775.95	283.27	259.77	3.9297	237	363.78	422.84	372.70	4.6329
168	769.21	285.30	261.59	3.9418	238	360.72	424.43	373.87	4.6396
169	762.40	287.33	263.41	3.9539	239	357.72	426.01	375.03	4.6462
170	755.53	289.37	265.23	3.9659	240	354.78	427.59	376.18	4.6528
171	748.60	291.43	267.06	3.9780	241	351.90	429.14	377.32	4.6593
172	741.61	293.49	268.90	3.9900	242	349.08	430.69	378.45	4.6657
173	734.56	295.57	270.74	4.0020	243	346.31	432.23	379.57	4.6720
174	727.46	297.65	272.58	4.0141	244	343.60	433.76	380.68	4.6783
175	720.31	299.75	274.43	4.0261	245	340.93	435.28	381.79	4.6845
176	713.10	301.85	276.28	4.0381	246	338.32	436.79	382.88	4.6907
177	705.85	303.97	278.13	4.0500	247	335.75	438.29	383.97	4.6968
178	698.55	306.09	279.99	4.0620	248	333.24	439.78	385.05	4.7028
179	691.21	308.23	281.84	4.0740	249	330.77	441.26	386.12	4.7088
180	683.83	310.38	283.70	4.0859	250	328.34	442.74	387.19	4.7147
181	676.42	312.53	285.57	4.0979	251	325.96	444.20	388.25	4.7205
182	668.99	314.69	287.43	4.1098	252	323.62	445.66	389.30	4.7263
183	661.53	316.86	289.29	4.1217	253	321.32	447.11	390.35	4.7321
184	654.06	319.04	291.15	4.1335	254	319.06	448.55	391.39	4.7377
185	646.58	321.22	293.01	4.1454	255	316.84	449.98	392.42	4.7434
186	639.10	323.41	294.87	4.1571	256	314.66	451.41	393.45	4.7489
187	631.62	325.60	296.72	4.1689	257	312.51	452.83	394.47	4.7545
188	624.16	327.79	298.57	4.1806	258	310.40	454.24	395.48	4.7600
189	616.71	329.99	300.42	4.1923	259	308.33	455.64	396.49	4.7654
190	609.30	332.19	302.25	4.2039	260	306.29	457.04	397.49	4.7708
191	601.92	334.39	304.08	4.2154	261	304.29	458.43	398.49	4.7761
192	594.59	336.58	305.91	4.2269	262	302.31	459.81	399.48	4.7814
193	587.31	338.78	307.72	4.2383	263	300.37	461.19	400.47	4.7866
194	580.09	340.97	309.52	4.2496	264	298.46	462.56	401.45	4.7918
195	572.93	343.15	311.32	4.2608	265	296.58	463.93	402.43	4.7970
196	565.85	345.33	313.10	4.2720	266	294.73	465.28	403.40	4.8021
197	558.84	347.50	314.87	4.2830	267	292.90	466.64	404.37	4.8072
198	551.93	349.67	316.62	4.2940	268	291.11	467.98	405.33	4.8122
199	545.10	351.82	318.36	4.3048	269	289.34	469.33	406.29	4.8172
200	538.37	353.96	320.09	4.3156	270	287.60	470.66	407.25	4.8222
201	531.74	356.10	321.80	4.3262	271	285.89	471.99	408.20	4.8271
202	525.22	358.22	323.49	4.3367	272	284.20	473.32	409.14	4.8320
203	518.80	360.33	325.17	4.3471	273	282.53	474.64	410.08	4.8368
204	512.49	362.42	326.83	4.3574	274	280.89	475.95	411.02	4.8416
205	506.30	364.50	328.48	4.3676	275	279.27	477.26	411.95	4.8464
206	500.21	366.57	330.10	4.3777	276	277.68	478.57	412.88	4.8511
207	494.25	368.62	331.71	4.3876	277	276.11	479.87	413.81	4.8558
208	488.40	370.65	333.31	4.3974	278	274.56	481.16	414.73	4.8605
209	482.67	372.67	334.88	4.4071	279	273.03	482.45	415.65	4.8651
210	477.05	374.67	336.44	4.4166	280	271.52	483.74	416.57	4.8697
211	471.55	376.66	337.98	4.4261	281	270.03	485.02	417.48	4.8743
212	466.17	378.63	339.51	4.4354	282	268.57	486.30	418.39	4.8789
213	460.90	380.58	341.01	4.4446	283	267.12	487.57	419.29	4.8834
214	455.74	382.52	342.50	4.4537	284	265.69	488.84	420.19	4.8878
215	450.70	384.44	343.97	4.4626	285	264.28	490.10	421.09	4.8923
216	445.76	386.35	345.43	4.4714	286	262.89	491.36	421.99	4.8967
217	440.94	388.23	346.87	4.4802	287	261.52	492.62	422.88	4.9011
218	436.22	390.10	348.29	4.4888	288	260.17	493.88	423.77	4.9054
219	431.60	391.96	349.70	4.4973	289	258.83	495.12	424.66	4.9098
220	427.09	393.80	351.09	4.5056	290	257.51	496.37	425.54	4.9141
221	422.67	395.62	352.47	4.5139	291	256.20	497.61	426.43	4.9184
222	418.36	397.43	353.83	4.5221	292	254.92	498.85	427.30	4.9226
223	414.13	399.22	355.18	4.5301	293	253.64	500.09	428.18	4.9268
224	410.01	401.00	356.52	4.5381	294	252.39	501.32	429.05	4.9310
225	405.97	402.76	357.84	4.5459	295	251.15	502.55	429.93	4.9352
226	402.02	404.51	359.14	4.5537	296	249.92	503.77	430.79	4.9393
227	398.16	406.24	360.44	4.5613	297	248.71	504.99	431.66	4.9435
228	394.38	407.96	361.72	4.5689	298	247.51	506.21	432.53	4.9476
229	390.68	409.67	362.98	4.5763	299	246.33	507.43	433.39	4.9516
230	387.06	411.36	364.24	4.5837	300	245.16	508.64	434.25	4.9557

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
					91	1175.7	153.21	135.97	2.8816
					92	1171.4	154.85	137.55	2.8996
					93	1167.1	156.50	139.14	2.9174
					94	1162.7	158.16	140.73	2.9351
					95	1158.3	159.82	142.32	2.9527
					96	1154.0	161.48	143.92	2.9702
					97	1149.6	163.16	145.53	2.9875
					98	1145.1	164.83	147.14	3.0047
					99	1140.7	166.51	148.75	3.0217
					100	1136.3	168.19	150.36	3.0386
					101	1131.8	169.88	151.97	3.0554
					102	1127.3	171.56	153.59	3.0720
					103	1122.9	173.25	155.20	3.0884
					104	1118.4	174.94	156.82	3.1048
					105	1113.9	176.63	158.43	3.1209
					106	1109.4	178.31	160.05	3.1369
					107	1104.8	180.00	161.66	3.1527
					108	1100.3	181.69	163.27	3.1684
					109	1095.7	183.37	164.88	3.1840
					110	1091.2	185.05	166.48	3.1993
					111	1086.6	186.73	168.08	3.2145
					112	1082.0	188.41	169.68	3.2296
					113	1077.4	190.09	171.28	3.2444
					114	1072.8	191.76	172.87	3.2592
					115	1068.2	193.42	174.45	3.2737
					116	1063.5	195.09	176.03	3.2881
					117	1058.9	196.75	177.61	3.3024
					118	1054.2	198.40	179.18	3.3165
					119	1049.5	200.05	180.75	3.3304
					120	1044.8	201.70	182.31	3.3442
					121	1040.1	203.35	183.86	3.3578
					122	1035.4	204.98	185.41	3.3713
					123	1030.7	206.62	186.96	3.3847
					124	1025.9	208.25	188.50	3.3979
					125	1021.1	209.88	190.04	3.4110
					126	1016.3	211.51	191.57	3.4239
					127	1011.5	213.13	193.10	3.4368
					128	1006.7	214.75	194.62	3.4495
					129	1001.8	216.37	196.14	3.4621
					130	996.93	217.99	197.66	3.4746
					131	992.04	219.61	199.18	3.4870
					132	987.12	221.23	200.70	3.4993
					133	982.18	222.85	202.22	3.5115
					134	977.22	224.47	203.73	3.5237
					135	972.23	226.10	205.25	3.5358
					136	967.22	227.73	206.78	3.5478
					137	962.19	229.36	208.30	3.5598
					138	957.13	231.01	209.83	3.5717
					139	952.04	232.66	211.37	3.5837
					140	946.92	234.32	212.91	3.5956
					141	941.78	235.91	214.40	3.6069
					142	936.61	237.52	215.89	3.6183
					143	931.41	239.15	217.39	3.6297
					144	926.18	240.78	218.90	3.6411
					145	920.91	242.44	220.43	3.6526
					146	915.62	244.11	221.98	3.6641
					147	910.29	245.80	223.54	3.6757
					148	904.93	247.52	225.12	3.6873
					149	899.54	249.25	226.72	3.6990
					150	894.11	251.00	228.34	3.7108
					151	888.64	252.77	229.96	3.7226
					152	883.14	254.54	231.60	3.7343
					153	877.60	256.31	233.22	3.7459
					154	872.02	258.02	234.78	3.7571
					155	866.41	259.75	236.12	3.7669
86	1199.5	145.44	128.55	2.7940	156	860.75	261.39	237.85	3.7790
87	1192.8	146.72	129.73	2.8087	157	855.06	263.27	239.57	3.7910
88	1188.5	148.33	131.28	2.8271	158	849.32	265.16	241.30	3.8030
89	1184.3	149.95	132.84	2.8454	159	843.54	267.05	243.02	3.8149
90	1180.0	151.57	134.40	2.8636	160	837.73	268.94	244.75	3.8267

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
161	831.87	270.84	246.48	3.8386	231	423.76	407.60	359.78	4.5457
162	825.96	272.74	248.21	3.8503	232	420.04	409.29	361.04	4.5530
163	820.02	274.65	249.94	3.8621	233	416.39	410.97	362.30	4.5602
164	814.03	276.56	251.67	3.8738	234	412.81	412.63	363.54	4.5674
165	807.99	278.48	253.40	3.8854	235	409.29	414.29	364.78	4.5744
166	801.92	280.40	255.13	3.8971	236	405.84	415.93	366.00	4.5814
167	795.80	282.33	256.87	3.9087	237	402.46	417.57	367.21	4.5883
168	789.63	284.27	258.61	3.9202	238	399.14	419.19	368.42	4.5952
169	783.43	286.21	260.35	3.9318	239	395.88	420.80	369.61	4.6019
170	777.18	288.16	262.09	3.9433	240	392.68	422.40	370.80	4.6086
171	770.88	290.12	263.83	3.9547	241	389.54	424.00	371.97	4.6152
172	764.55	292.08	265.58	3.9662	242	386.46	425.58	373.14	4.6218
173	758.18	294.05	267.33	3.9776	243	383.43	427.15	374.30	4.6283
174	751.76	296.03	269.08	3.9890	244	380.46	428.71	375.45	4.6347
175	745.31	298.02	270.83	4.0004	245	377.54	430.26	376.59	4.6410
176	738.82	300.01	272.58	4.0117	246	374.67	431.81	377.72	4.6473
177	732.30	302.01	274.33	4.0231	247	371.85	433.34	378.84	4.6535
178	725.74	304.01	276.09	4.0344	248	369.09	434.87	379.96	4.6597
179	719.15	306.03	277.85	4.0456	249	366.37	436.38	381.07	4.6658
180	712.54	308.05	279.61	4.0569	250	363.70	437.89	382.17	4.6718
181	705.90	310.07	281.36	4.0681	251	361.07	439.39	383.26	4.6778
182	699.23	312.10	283.12	4.0793	252	358.49	440.88	384.35	4.6838
183	692.55	314.14	284.88	4.0905	253	355.96	442.36	385.43	4.6896
184	685.85	316.18	286.64	4.1016	254	353.46	443.84	386.50	4.6954
185	679.14	318.23	288.39	4.1127	255	351.01	445.30	387.57	4.7012
186	672.42	320.29	290.15	4.1238	256	348.60	446.76	388.63	4.7069
187	665.70	322.34	291.90	4.1348	257	346.23	448.21	389.68	4.7126
188	658.97	324.40	293.65	4.1458	258	343.89	449.66	390.73	4.7182
189	652.25	326.47	295.40	4.1567	259	341.60	451.10	391.77	4.7237
190	645.55	328.53	297.14	4.1676	260	339.34	452.53	392.81	4.7293
191	638.85	330.60	298.88	4.1785	261	337.11	453.95	393.84	4.7347
192	632.18	332.67	300.61	4.1893	262	334.93	455.37	394.86	4.7401
193	625.53	334.74	302.34	4.2000	263	332.77	456.78	395.88	4.7455
194	618.91	336.81	304.06	4.2107	264	330.65	458.18	396.89	4.7508
195	612.33	338.87	305.78	4.2214	265	328.56	459.58	397.90	4.7561
196	605.78	340.94	307.49	4.2319	266	326.51	460.97	398.90	4.7614
197	599.28	343.00	309.18	4.2424	267	324.48	462.35	399.90	4.7665
198	592.83	345.06	310.88	4.2528	268	322.49	463.73	400.89	4.7717
199	586.43	347.11	312.56	4.2632	269	320.52	465.10	401.88	4.7768
200	580.09	349.16	314.23	4.2735	270	318.59	466.47	402.86	4.7819
201	573.82	351.21	315.89	4.2836	271	316.68	467.83	403.84	4.7869
202	567.61	353.24	317.54	4.2938	272	314.80	469.19	404.81	4.7919
203	561.46	355.27	319.18	4.3038	273	312.95	470.54	405.78	4.7969
204	555.40	357.29	320.81	4.3137	274	311.12	471.88	406.75	4.8018
205	549.40	359.31	322.42	4.3236	275	309.32	473.22	407.71	4.8067
206	543.49	361.31	324.02	4.3333	276	307.55	474.56	408.66	4.8115
207	537.66	363.31	325.61	4.3430	277	305.80	475.89	409.62	4.8163
208	531.91	365.29	327.19	4.3525	278	304.07	477.21	410.57	4.8211
209	526.25	367.26	328.76	4.3620	279	302.37	478.53	411.51	4.8258
210	520.67	369.23	330.31	4.3714	280	300.69	479.85	412.45	4.8305
211	515.18	371.18	331.84	4.3806	281	299.04	481.16	413.39	4.8352
212	509.78	373.12	333.37	4.3898	282	297.40	482.46	414.32	4.8398
213	504.47	375.05	334.88	4.3989	283	295.79	483.76	415.25	4.8445
214	499.25	376.96	336.37	4.4079	284	294.20	485.06	416.18	4.8490
215	494.12	378.87	337.85	4.4167	285	292.63	486.35	417.10	4.8536
216	489.08	380.76	339.32	4.4255	286	291.08	487.64	418.02	4.8581
217	484.13	382.64	340.78	4.4342	287	289.55	488.93	418.94	4.8626
218	479.27	384.50	342.22	4.4428	288	288.04	490.21	419.85	4.8670
219	474.50	386.36	343.65	4.4513	289	286.55	491.48	420.76	4.8714
220	469.81	388.20	345.06	4.4596	290	285.08	492.76	421.67	4.8758
221	465.21	390.02	346.46	4.4679	291	283.62	494.02	422.57	4.8802
222	460.70	391.84	347.85	4.4761	292	282.19	495.29	423.48	4.8845
223	456.27	393.64	349.22	4.4842	293	280.77	496.55	424.37	4.8889
224	451.93	395.43	350.59	4.4922	294	279.37	497.81	425.27	4.8931
225	447.67	397.20	351.94	4.5001	295	277.99	499.06	426.16	4.8974
226	443.49	398.97	353.27	4.5079	296	276.62	500.31	427.05	4.9016
227	439.39	400.72	354.60	4.5157	297	275.27	501.56	427.94	4.9058
228	435.37	402.46	355.91	4.5233	298	273.94	502.80	428.83	4.9100
229	431.43	404.18	357.21	4.5309	299	272.62	504.04	429.71	4.9142
230	427.56	405.90	358.50	4.5383	300	271.31	505.28	430.59	4.9183

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
					91	1179.2	154.36	135.46	2.8754
					92	1174.9	156.00	137.02	2.8933
					93	1170.6	157.64	138.60	2.9110
					94	1166.3	159.29	140.18	2.9286
					95	1162.0	160.94	141.76	2.9462
					96	1157.7	162.60	143.35	2.9635
					97	1153.4	164.27	144.94	2.9808
					98	1149.0	165.94	146.54	2.9979
					99	1144.7	167.61	148.13	3.0149
					100	1140.3	169.28	149.73	3.0317
					101	1135.9	170.96	151.34	3.0484
					102	1131.5	172.64	152.94	3.0649
					103	1127.1	174.32	154.54	3.0813
					104	1122.7	176.00	156.14	3.0976
					105	1118.3	177.68	157.75	3.1136
					106	1113.8	179.36	159.35	3.1296
					107	1109.4	181.04	160.94	3.1453
					108	1105.0	182.72	162.54	3.1609
					109	1100.5	184.39	164.13	3.1764
					110	1096.0	186.06	165.73	3.1917
					111	1091.5	187.74	167.31	3.2068
					112	1087.0	189.40	168.90	3.2217
					113	1082.5	191.07	170.48	3.2365
					114	1078.0	192.73	172.05	3.2512
					115	1073.5	194.39	173.62	3.2656
					116	1069.0	196.04	175.18	3.2799
					117	1064.4	197.69	176.74	3.2941
					118	1059.9	199.33	178.30	3.3081
					119	1055.3	200.97	179.85	3.3219
					120	1050.7	202.61	181.39	3.3356
					121	1046.1	204.24	182.93	3.3492
					122	1041.5	205.86	184.46	3.3625
					123	1036.9	207.49	185.99	3.3758
					124	1032.2	209.11	187.51	3.3889
					125	1027.6	210.72	189.03	3.4019
					126	1022.9	212.33	190.54	3.4147
					127	1018.3	213.94	192.05	3.4274
					128	1013.6	215.55	193.55	3.4400
					129	1008.9	217.15	195.05	3.4525
					130	1004.1	218.75	196.55	3.4649
					131	999.38	220.35	198.05	3.4771
					132	994.62	221.95	199.54	3.4893
					133	989.84	223.56	201.04	3.5014
					134	985.05	225.16	202.53	3.5134
					135	980.23	226.76	204.02	3.5253
					136	975.40	228.37	205.52	3.5372
					137	970.54	229.99	207.02	3.5490
					138	965.67	231.61	208.52	3.5608
					139	960.77	233.23	210.03	3.5726
					140	955.85	234.87	211.55	3.5843
					141	950.91	236.44	213.00	3.5955
					142	945.95	238.03	214.46	3.6067
					143	940.96	239.62	215.93	3.6179
					144	935.95	241.23	217.42	3.6291
					145	930.91	242.86	218.91	3.6404
					146	925.85	244.50	220.42	3.6517
					147	920.77	246.16	221.95	3.6631
					148	915.66	247.84	223.50	3.6745
					149	910.52	249.54	225.06	3.6860
					150	905.35	251.26	226.64	3.6975
					151	900.16	252.99	228.23	3.7090
					152	894.94	254.73	229.82	3.7205
					153	889.69	256.45	231.40	3.7319
					154	884.41	258.13	232.92	3.7428
					155	879.11	259.58	234.22	3.7523
86	1203.4	146.66	128.13	2.7885	156	873.77	261.41	235.90	3.7641
87	1196.0	147.90	129.26	2.8028	157	868.40	263.25	237.58	3.7759
88	1191.8	149.50	130.80	2.8211	158	863.00	265.09	239.26	3.7875
89	1187.6	151.11	132.34	2.8393	159	857.57	266.93	240.94	3.7991
90	1183.4	152.73	133.90	2.8574	160	852.11	268.77	242.61	3.8107

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
161	846.62	270.62	244.29	3.8222	231	460.57	402.99	354.59	4.5059
162	841.09	272.47	245.96	3.8336	232	456.70	404.68	355.87	4.5132
163	835.53	274.32	247.64	3.8450	233	452.89	406.37	357.15	4.5205
164	829.95	276.17	249.31	3.8564	234	449.14	408.05	358.42	4.5277
165	824.32	278.03	250.99	3.8677	235	445.46	409.72	359.67	4.5348
166	818.67	279.89	252.67	3.8789	236	441.84	411.37	360.92	4.5418
167	812.99	281.76	254.34	3.8901	237	438.28	413.02	362.16	4.5488
168	807.27	283.63	256.02	3.9013	238	434.78	414.66	363.39	4.5557
169	801.52	285.51	257.69	3.9124	239	431.34	416.29	364.61	4.5625
170	795.74	287.39	259.37	3.9235	240	427.96	417.90	365.82	4.5693
171	789.93	289.27	261.05	3.9346	241	424.64	419.51	367.02	4.5760
172	784.09	291.16	262.73	3.9456	242	421.37	421.11	368.21	4.5826
173	778.22	293.05	264.41	3.9566	243	418.15	422.71	369.40	4.5892
174	772.32	294.95	266.09	3.9675	244	414.99	424.29	370.57	4.5957
175	766.39	296.85	267.77	3.9784	245	411.88	425.86	371.74	4.6021
176	760.44	298.76	269.45	3.9893	246	408.82	427.42	372.90	4.6085
177	754.46	300.67	271.13	4.0001	247	405.81	428.98	374.05	4.6148
178	748.46	302.59	272.81	4.0109	248	402.86	430.53	375.19	4.6210
179	742.43	304.51	274.49	4.0217	249	399.95	432.07	376.33	4.6272
180	736.38	306.44	276.17	4.0324	250	397.08	433.60	377.46	4.6334
181	730.31	308.37	277.85	4.0431	251	394.27	435.12	378.58	4.6394
182	724.23	310.31	279.53	4.0538	252	391.50	436.63	379.69	4.6454
183	718.12	312.25	281.21	4.0645	253	388.77	438.14	380.80	4.6514
184	712.01	314.20	282.89	4.0751	254	386.08	439.64	381.90	4.6573
185	705.88	316.15	284.57	4.0856	255	383.44	441.13	382.99	4.6632
186	699.75	318.10	286.24	4.0961	256	380.84	442.61	384.08	4.6690
187	693.61	320.06	287.92	4.1066	257	378.28	444.09	385.16	4.6747
188	687.47	322.02	289.59	4.1171	258	375.76	445.56	386.23	4.6805
189	681.32	323.98	291.26	4.1275	259	373.28	447.02	387.30	4.6861
190	675.18	325.94	292.93	4.1379	260	370.84	448.48	388.36	4.6917
191	669.05	327.91	294.59	4.1482	261	368.44	449.92	389.42	4.6973
192	662.92	329.88	296.25	4.1585	262	366.07	451.36	390.47	4.7028
193	656.81	331.85	297.91	4.1687	263	363.73	452.80	391.51	4.7083
194	650.71	333.81	299.56	4.1789	264	361.44	454.23	392.55	4.7137
195	644.64	335.78	301.20	4.1890	265	359.17	455.65	393.59	4.7191
196	638.58	337.75	302.85	4.1991	266	356.94	457.07	394.61	4.7244
197	632.55	339.72	304.48	4.2091	267	354.74	458.48	395.64	4.7297
198	626.56	341.69	306.11	4.2190	268	352.57	459.88	396.65	4.7349
199	620.59	343.65	307.73	4.2289	269	350.44	461.28	397.67	4.7401
200	614.66	345.62	309.35	4.2388	270	348.33	462.67	398.68	4.7453
201	608.77	347.58	310.96	4.2486	271	346.26	464.06	399.68	4.7504
202	602.93	349.53	312.56	4.2583	272	344.21	465.44	400.68	4.7555
203	597.13	351.48	314.15	4.2679	273	342.20	466.81	401.67	4.7606
204	591.37	353.43	315.74	4.2775	274	340.21	468.18	402.66	4.7656
205	585.67	355.37	317.31	4.2870	275	338.25	469.55	403.64	4.7705
206	580.03	357.31	318.88	4.2964	276	336.31	470.90	404.62	4.7755
207	574.44	359.24	320.44	4.3057	277	334.41	472.26	405.60	4.7804
208	568.91	361.17	321.98	4.3150	278	332.52	473.61	406.57	4.7852
209	563.44	363.09	323.52	4.3242	279	330.67	474.95	407.54	4.7900
210	558.03	365.00	325.05	4.3333	280	328.83	476.29	408.50	4.7948
211	552.69	366.90	326.57	4.3424	281	327.03	477.63	409.46	4.7996
212	547.41	368.79	328.07	4.3513	282	325.24	478.96	410.42	4.8043
213	542.21	370.68	329.57	4.3602	283	323.48	480.28	411.37	4.8090
214	537.07	372.56	331.05	4.3690	284	321.75	481.60	412.32	4.8137
215	532.00	374.43	332.52	4.3777	285	320.03	482.92	413.26	4.8183
216	527.00	376.29	333.99	4.3864	286	318.34	484.23	414.20	4.8229
217	522.07	378.14	335.44	4.3949	287	316.66	485.54	415.14	4.8275
218	517.21	379.98	336.88	4.4034	288	315.01	486.84	416.08	4.8320
219	512.43	381.81	338.31	4.4117	289	313.38	488.14	417.01	4.8365
220	507.72	383.63	339.72	4.4200	290	311.77	489.43	417.94	4.8410
221	503.08	385.44	341.13	4.4283	291	310.18	490.73	418.86	4.8454
222	498.51	387.24	342.53	4.4364	292	308.61	492.01	419.78	4.8498
223	494.01	389.03	343.91	4.4444	293	307.06	493.30	420.70	4.8542
224	489.59	390.81	345.28	4.4524	294	305.53	494.58	421.62	4.8586
225	485.23	392.58	346.64	4.4603	295	304.01	495.85	422.53	4.8629
226	480.95	394.34	347.99	4.4681	296	302.52	497.12	423.44	4.8672
227	476.74	396.09	349.33	4.4758	297	301.04	498.39	424.35	4.8715
228	472.59	397.83	350.66	4.4835	298	299.58	499.66	425.25	4.8757
229	468.52	399.56	351.98	4.4910	299	298.13	500.92	426.15	4.8800
230	464.51	401.28	353.29	4.4985	300	296.71	502.18	427.05	4.8842

240.00 ATMOSPHERE ISOBAR

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
					91	1182.5	155.52	134.96	2.8693
					92	1178.3	157.15	136.51	2.8871
					93	1174.1	158.78	138.07	2.9047
					94	1169.9	160.43	139.64	2.9223
					95	1165.6	162.08	141.21	2.9397
					96	1161.4	163.73	142.79	2.9571
					97	1157.1	165.39	144.37	2.9742
					98	1152.8	167.05	145.95	2.9913
					99	1148.5	168.71	147.54	3.0082
					100	1144.2	170.38	149.13	3.0250
					101	1139.9	172.05	150.72	3.0416
					102	1135.6	173.72	152.31	3.0581
					103	1131.3	175.40	153.90	3.0744
					104	1126.9	177.07	155.49	3.0905
					105	1122.6	178.74	157.08	3.1065
					106	1118.2	180.42	158.67	3.1224
					107	1113.8	182.09	160.25	3.1381
					108	1109.5	183.76	161.84	3.1536
					109	1105.1	185.42	163.42	3.1690
					110	1100.7	187.09	165.00	3.1842
					111	1096.3	188.75	166.57	3.1992
					112	1091.9	190.41	168.14	3.2141
					113	1087.5	192.07	169.70	3.2288
					114	1083.0	193.72	171.27	3.2434
					115	1078.6	195.37	172.82	3.2578
					116	1074.2	197.01	174.37	3.2720
					117	1069.7	198.65	175.92	3.2861
					118	1065.3	200.28	177.45	3.3000
					119	1060.8	201.91	178.99	3.3137
					120	1056.3	203.54	180.52	3.3273
					121	1051.8	205.16	182.04	3.3408
					122	1047.3	206.77	183.55	3.3541
					123	1042.8	208.38	185.06	3.3672
					124	1038.3	209.99	186.57	3.3802
					125	1033.8	211.59	188.07	3.3931
					126	1029.2	213.19	189.56	3.4058
					127	1024.7	214.78	191.05	3.4184
					128	1020.1	216.38	192.54	3.4309
					129	1015.5	217.97	194.02	3.4433
					130	1010.9	219.55	195.50	3.4556
					131	1006.3	221.14	196.97	3.4677
					132	1001.7	222.72	198.45	3.4798
					133	997.08	224.31	199.92	3.4917
					134	992.43	225.89	201.39	3.5036
					135	987.77	227.48	202.86	3.5154
					136	983.09	229.07	204.34	3.5271
					137	978.39	230.67	205.81	3.5388
					138	973.68	232.27	207.29	3.5505
					139	968.95	233.88	208.78	3.5621
					140	964.20	235.49	210.27	3.5737
					141	959.44	237.04	211.70	3.5847
					142	954.66	238.60	213.13	3.5957
					143	949.86	240.18	214.58	3.6068
					144	945.04	241.76	216.03	3.6179
					145	940.20	243.36	217.50	3.6290
					146	935.34	244.98	218.98	3.6401
					147	930.46	246.62	220.48	3.6513
					148	925.56	248.27	222.00	3.6625
					149	920.65	249.94	223.53	3.6738
					150	915.70	251.63	225.07	3.6851
					151	910.74	253.33	226.63	3.6965
					152	905.76	255.04	228.19	3.7078
					153	900.75	256.73	229.73	3.7189
					154	895.72	258.37	231.22	3.7296
					155	890.67	259.78	232.48	3.7389
86	1207.3	147.87	127.73	2.7831	156	885.59	261.59	234.13	3.7505
87	1199.2	149.09	128.81	2.7970	157	880.50	263.39	235.77	3.7620
88	1195.0	150.68	130.33	2.8152	158	875.37	265.19	237.41	3.7734
89	1190.9	152.29	131.87	2.8333	159	870.23	266.99	239.04	3.7848
90	1186.7	153.90	133.41	2.8513	160	865.06	268.79	240.68	3.7961

TEMPER- ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER- ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
161	859.87	270.59	242.31	3.8073	231	493.92	399.13	349.89	4.4708
162	854.65	272.40	243.95	3.8185	232	489.98	400.82	351.19	4.4781
163	849.41	274.21	245.58	3.8296	233	486.10	402.50	352.47	4.4854
164	844.14	276.02	247.21	3.8407	234	482.27	404.18	353.75	4.4926
165	838.85	277.83	248.84	3.8517	235	478.50	405.84	355.02	4.4997
166	833.54	279.64	250.47	3.8626	236	474.79	407.50	356.28	4.5067
167	828.20	281.46	252.09	3.8735	237	471.13	409.15	357.53	4.5137
168	822.83	283.27	253.72	3.8844	238	467.53	410.79	358.78	4.5206
169	817.45	285.10	255.35	3.8952	239	463.98	412.42	360.01	4.5274
170	812.04	286.92	256.97	3.9060	240	460.49	414.05	361.24	4.5342
171	806.61	288.75	258.60	3.9167	241	457.05	415.66	362.46	4.5409
172	801.15	290.58	260.22	3.9274	242	453.66	417.27	363.67	4.5476
173	795.68	292.41	261.85	3.9380	243	450.32	418.87	364.87	4.5542
174	790.18	294.25	263.47	3.9486	244	447.03	420.46	366.06	4.5607
175	784.66	296.09	265.10	3.9591	245	443.79	422.04	367.25	4.5672
176	779.12	297.93	266.72	3.9696	246	440.60	423.62	368.43	4.5736
177	773.57	299.78	268.34	3.9801	247	437.46	425.19	369.60	4.5800
178	767.99	301.63	269.97	3.9905	248	434.37	426.74	370.76	4.5863
179	762.40	303.48	271.59	4.0009	249	431.32	428.30	371.92	4.5925
180	756.79	305.34	273.21	4.0113	250	428.32	429.84	373.06	4.5987
181	751.17	307.20	274.83	4.0216	251	425.36	431.38	374.21	4.6048
182	745.53	309.07	276.45	4.0318	252	422.45	432.90	375.34	4.6109
183	739.88	310.93	278.07	4.0421	253	419.58	434.43	376.47	4.6169
184	734.22	312.80	279.68	4.0523	254	416.75	435.94	377.59	4.6229
185	728.56	314.68	281.30	4.0624	255	413.96	437.45	378.70	4.6288
186	722.88	316.55	282.91	4.0725	256	411.22	438.95	379.81	4.6347
187	717.20	318.43	284.53	4.0826	257	408.51	440.44	380.91	4.6405
188	711.52	320.31	286.14	4.0926	258	405.85	441.93	382.01	4.6463
189	705.83	322.20	287.74	4.1026	259	403.22	443.41	383.10	4.6520
190	700.15	324.08	289.35	4.1126	260	400.63	444.88	384.18	4.6577
191	694.46	325.97	290.95	4.1225	261	398.08	446.34	385.26	4.6633
192	688.79	327.86	292.55	4.1323	262	395.57	447.80	386.33	4.6689
193	683.12	329.75	294.15	4.1422	263	393.09	449.26	387.39	4.6744
194	677.46	331.64	295.74	4.1519	264	390.65	450.70	388.45	4.6799
195	671.81	333.53	297.33	4.1616	265	388.24	452.14	389.51	4.6854
196	666.17	335.42	298.92	4.1713	266	385.86	453.58	390.56	4.6908
197	660.56	337.31	300.50	4.1809	267	383.52	455.01	391.60	4.6961
198	654.96	339.20	302.07	4.1905	268	381.21	456.43	392.64	4.7014
199	649.38	341.09	303.64	4.2000	269	378.93	457.85	393.67	4.7067
200	643.83	342.98	305.21	4.2095	270	376.69	459.26	394.70	4.7119
201	638.30	344.87	306.77	4.2189	271	374.47	460.66	395.72	4.7171
202	632.81	346.75	308.32	4.2283	272	372.29	462.06	396.74	4.7223
203	627.34	348.64	309.87	4.2376	273	370.13	463.46	397.76	4.7274
204	621.91	350.52	311.41	4.2468	274	368.00	464.85	398.76	4.7325
205	616.51	352.39	312.95	4.2560	275	365.90	466.23	399.77	4.7375
206	611.16	354.27	314.48	4.2651	276	363.83	467.61	400.77	4.7425
207	605.84	356.14	316.00	4.2742	277	361.79	468.98	401.77	4.7475
208	600.56	358.00	317.51	4.2832	278	359.77	470.35	402.76	4.7524
209	595.33	359.86	319.02	4.2921	279	357.78	471.71	403.74	4.7573
210	590.15	361.72	320.51	4.3009	280	355.82	473.07	404.73	4.7622
211	585.01	363.57	322.00	4.3097	281	353.88	474.43	405.71	4.7670
212	579.93	365.42	323.48	4.3185	282	351.96	475.78	406.68	4.7718
213	574.89	367.26	324.96	4.3271	283	350.07	477.12	407.65	4.7766
214	569.90	369.09	326.42	4.3357	284	348.21	478.46	408.62	4.7813
215	564.97	370.92	327.88	4.3442	285	346.36	479.80	409.59	4.7860
216	560.10	372.74	329.32	4.3527	286	344.54	481.13	410.55	4.7907
217	555.28	374.55	330.76	4.3611	287	342.75	482.45	411.50	4.7953
218	550.51	376.36	332.19	4.3694	288	340.97	483.78	412.46	4.7999
219	545.81	378.16	333.60	4.3776	289	339.22	485.09	413.41	4.8045
220	541.16	379.95	335.01	4.3858	290	337.48	486.41	414.35	4.8090
221	536.57	381.73	336.41	4.3938	291	335.77	487.72	415.29	4.8135
222	532.03	383.51	337.80	4.4019	292	334.08	489.02	416.23	4.8180
223	527.56	385.28	339.18	4.4098	293	332.41	490.33	417.17	4.8224
224	523.15	387.04	340.56	4.4177	294	330.76	491.63	418.10	4.8269
225	518.79	388.79	341.92	4.4255	295	329.13	492.92	419.03	4.8313
226	514.50	390.53	343.27	4.4332	296	327.51	494.21	419.96	4.8356
227	510.27	392.27	344.61	4.4409	297	325.92	495.50	420.88	4.8400
228	506.09	394.00	345.95	4.4485	298	324.34	496.78	421.81	4.8443
229	501.97	395.71	347.27	4.4560	299	322.79	498.06	422.72	4.8486
230	497.92	397.42	348.58	4.4634	300	321.25	499.34	423.64	4.8528

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
					91	1185.8	156.68	134.47	2.8632
					92	1181.7	158.31	136.01	2.8810
					93	1177.5	159.94	137.56	2.8986
					94	1173.3	161.57	139.12	2.9161
					95	1169.2	163.21	140.68	2.9335
					96	1165.0	164.86	142.25	2.9507
					97	1160.7	166.51	143.82	2.9678
					98	1156.5	168.17	145.39	2.9848
					99	1152.3	169.83	146.97	3.0017
					100	1148.0	171.49	148.54	3.0184
					101	1143.8	173.15	150.12	3.0349
					102	1139.5	174.82	151.70	3.0513
					103	1135.3	176.49	153.28	3.0676
					104	1131.0	178.15	154.86	3.0837
					105	1126.7	179.82	156.44	3.0996
					106	1122.4	181.48	158.01	3.1154
					107	1118.1	183.15	159.59	3.1310
					108	1113.8	184.81	161.16	3.1465
					109	1109.5	186.47	162.73	3.1618
					110	1105.2	188.13	164.29	3.1770
					111	1100.9	189.78	165.85	3.1919
					112	1096.6	191.43	167.41	3.2067
					113	1092.2	193.08	168.96	3.2214
					114	1087.9	194.73	170.51	3.2359
					115	1083.6	196.36	172.05	3.2502
					116	1079.2	198.00	173.59	3.2643
					117	1074.8	199.63	175.12	3.2783
					118	1070.5	201.25	176.64	3.2921
					119	1066.1	202.87	178.16	3.3058
					120	1061.7	204.49	179.68	3.3193
					121	1057.3	206.10	181.18	3.3327
					122	1052.9	207.70	182.68	3.3459
					123	1048.5	209.30	184.18	3.3590
					124	1044.1	210.90	185.67	3.3719
					125	1039.7	212.49	187.15	3.3847
					126	1035.3	214.08	188.63	3.3973
					127	1030.8	215.66	190.10	3.4098
					128	1026.4	217.24	191.57	3.4222
					129	1021.9	218.81	193.03	3.4345
					130	1017.4	220.39	194.50	3.4466
					131	1013.0	221.96	195.95	3.4587
					132	1008.5	223.53	197.41	3.4706
					133	1004.0	225.10	198.86	3.4825
					134	999.43	226.67	200.31	3.4942
					135	994.90	228.25	201.77	3.5059
					136	990.36	229.82	203.22	3.5175
					137	985.81	231.40	204.67	3.5291
					138	981.24	232.98	206.13	3.5406
					139	976.66	234.57	207.60	3.5521
					140	972.07	236.17	209.07	3.5635
					141	967.46	237.70	210.47	3.5745
					142	962.84	239.24	211.88	3.5854
					143	958.20	240.80	213.30	3.5963
					144	953.55	242.36	214.73	3.6072
					145	948.88	243.94	216.18	3.6181
					146	944.20	245.54	217.64	3.6291
					147	939.50	247.15	219.11	3.6402
					148	934.78	248.78	220.60	3.6512
					149	930.05	250.43	222.10	3.6623
					150	925.30	252.09	223.62	3.6735
					151	920.54	253.77	225.15	3.6847
					152	915.76	255.45	226.68	3.6958
					153	910.96	257.11	228.19	3.7068
					154	906.14	258.72	229.65	3.7173
					155	901.31	260.11	230.88	3.7264
86	1211.3	149.10	127.35	2.7778	156	896.45	261.88	232.49	3.7378
87	1202.2	150.28	128.36	2.7912	157	891.58	263.65	234.10	3.7491
88	1198.2	151.86	129.88	2.8094	158	886.70	265.42	235.71	3.7603
89	1194.1	153.46	131.40	2.8274	159	881.79	267.19	237.31	3.7715
90	1190.0	155.07	132.93	2.8454	160	876.86	268.96	238.91	3.7826

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
161	871.92	270.73	240.51	3.7936	231	524.01	395.93	345.65	4.4397
162	866.96	272.50	242.11	3.8045	232	520.06	397.61	346.95	4.4470
163	861.98	274.27	243.70	3.8154	233	516.17	399.28	348.24	4.4542
164	856.98	276.04	245.30	3.8263	234	512.33	400.94	349.52	4.4613
165	851.96	277.81	246.89	3.8370	235	508.53	402.60	350.79	4.4684
166	846.92	279.58	248.48	3.8478	236	504.79	404.25	352.06	4.4754
167	841.87	281.36	250.07	3.8584	237	501.09	405.89	353.32	4.4823
168	836.80	283.13	251.65	3.8690	238	497.45	407.53	354.57	4.4892
169	831.71	284.91	253.24	3.8796	239	493.85	409.16	355.81	4.4961
170	826.60	286.69	254.82	3.8901	240	490.30	410.78	357.04	4.5028
171	821.48	288.47	256.40	3.9005	241	486.80	412.39	358.27	4.5095
172	816.33	290.26	257.99	3.9109	242	483.34	414.00	359.49	4.5162
173	811.18	292.04	259.57	3.9213	243	479.93	415.60	360.70	4.5228
174	806.00	293.83	261.15	3.9316	244	476.57	417.19	361.91	4.5293
175	800.81	295.62	262.73	3.9418	245	473.26	418.77	363.11	4.5358
176	795.61	297.42	264.30	3.9521	246	469.99	420.35	364.30	4.5422
177	790.39	299.21	265.88	3.9622	247	466.76	421.92	365.48	4.5486
178	785.16	301.01	267.45	3.9724	248	463.58	423.48	366.65	4.5549
179	779.92	302.81	269.03	3.9824	249	460.44	425.04	367.82	4.5612
180	774.66	304.61	270.60	3.9925	250	457.35	426.59	368.99	4.5674
181	769.40	306.41	272.17	4.0025	251	454.30	428.13	370.14	4.5735
182	764.12	308.22	273.74	4.0124	252	451.28	429.67	371.29	4.5796
183	758.83	310.03	275.31	4.0223	253	448.32	431.20	372.43	4.5857
184	753.54	311.84	276.88	4.0322	254	445.39	432.72	373.57	4.5917
185	748.24	313.65	278.44	4.0420	255	442.50	434.23	374.70	4.5977
186	742.93	315.47	280.01	4.0518	256	439.65	435.74	375.82	4.6036
187	737.62	317.29	281.57	4.0616	257	436.84	437.24	376.94	4.6094
188	732.31	319.11	283.13	4.0713	258	434.07	438.74	378.05	4.6152
189	727.00	320.93	284.69	4.0809	259	431.33	440.23	379.15	4.6210
190	721.68	322.75	286.24	4.0905	260	428.63	441.71	380.25	4.6267
191	716.37	324.57	287.80	4.1001	261	425.97	443.19	381.35	4.6324
192	711.06	326.40	289.35	4.1096	262	423.35	444.66	382.43	4.6380
193	705.75	328.22	290.89	4.1191	263	420.76	446.13	383.51	4.6436
194	700.46	330.05	292.44	4.1286	264	418.20	447.59	384.59	4.6491
195	695.17	331.88	293.98	4.1380	265	415.68	449.04	385.66	4.6546
196	689.89	333.70	295.52	4.1473	266	413.19	450.49	386.73	4.6601
197	684.62	335.53	297.05	4.1566	267	410.74	451.93	387.79	4.6655
198	679.36	337.36	298.58	4.1659	268	408.31	453.36	388.84	4.6708
199	674.12	339.19	300.11	4.1751	269	405.92	454.79	389.89	4.6762
200	668.90	341.01	301.63	4.1842	270	403.56	456.22	390.94	4.6815
201	663.70	342.84	303.15	4.1933	271	401.23	457.64	391.98	4.6667
202	658.51	344.66	304.66	4.2024	272	398.93	459.05	393.01	4.6919
203	653.35	346.49	306.17	4.2114	273	396.66	460.46	394.05	4.6971
204	648.22	348.31	307.67	4.2204	274	394.42	461.86	395.07	4.7022
205	643.11	350.13	309.17	4.2293	275	392.21	463.26	396.09	4.7073
206	638.03	351.95	310.66	4.2381	276	390.02	464.66	397.11	4.7124
207	632.98	353.76	312.14	4.2469	277	387.87	466.04	398.12	4.7174
208	627.96	355.57	313.62	4.2556	278	385.74	467.43	399.13	4.7224
209	622.97	357.38	315.09	4.2643	279	383.64	468.81	400.14	4.7273
210	618.02	359.19	316.56	4.2729	280	381.56	470.18	401.14	4.7322
211	613.10	360.99	318.02	4.2815	281	379.51	471.55	402.13	4.7371
212	608.22	362.79	319.47	4.2900	282	377.48	472.91	403.12	4.7420
213	603.38	364.58	320.92	4.2984	283	375.48	474.27	404.11	4.7468
214	598.58	366.37	322.36	4.3068	284	373.50	475.63	405.10	4.7516
215	593.82	368.16	323.79	4.3151	285	371.55	476.98	406.08	4.7563
216	589.11	369.94	325.22	4.3234	286	369.62	478.33	407.05	4.7610
217	584.44	371.71	326.64	4.3316	287	367.72	479.67	408.02	4.7657
218	579.81	373.48	328.04	4.3397	288	365.83	481.01	408.99	4.7704
219	575.23	375.25	329.45	4.3478	289	363.97	482.34	409.96	4.7750
220	570.69	377.00	330.84	4.3558	290	362.13	483.67	410.92	4.7796
221	566.20	378.76	332.23	4.3637	291	360.32	485.00	411.88	4.7841
222	561.76	380.50	333.61	4.3716	292	358.52	486.32	412.84	4.7887
223	557.37	382.24	334.98	4.3795	293	356.74	487.64	413.79	4.7932
224	553.02	383.98	336.34	4.3872	294	354.99	488.95	414.74	4.7977
225	548.73	385.70	337.69	4.3949	295	353.25	490.26	415.68	4.8021
226	544.48	387.43	339.04	4.4025	296	351.54	491.57	416.62	4.8065
227	540.29	389.14	340.38	4.4101	297	349.84	492.87	417.56	4.8109
228	536.14	390.85	341.71	4.4176	298	348.16	494.17	418.50	4.8153
229	532.05	392.55	343.03	4.4251	299	346.51	495.46	419.43	4.8196
230	528.00	394.24	344.35	4.4324	300	344.87	496.75	420.36	4.8239

TEMPER- ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER- ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
					91	1189.1	157.85	133.99	2.8573
					92	1185.0	159.47	135.53	2.8750
					93	1180.9	161.09	137.07	2.8925
					94	1176.7	162.72	138.61	2.9100
					95	1172.6	164.36	140.16	2.9273
					96	1168.4	166.00	141.72	2.9445
					97	1164.3	167.65	143.28	2.9615
					98	1160.1	169.30	144.84	2.9785
					99	1155.9	170.95	146.41	2.9953
					100	1151.8	172.61	147.97	3.0119
					101	1147.6	174.26	149.54	3.0284
					102	1143.4	175.92	151.11	3.0447
					103	1139.2	177.58	152.68	3.0609
					104	1135.0	179.24	154.25	3.0770
					105	1130.7	180.90	155.81	3.0929
					106	1126.5	182.56	157.38	3.1086
					107	1122.3	184.22	158.94	3.1242
					108	1118.1	185.88	160.50	3.1396
					109	1113.8	187.53	162.06	3.1548
					110	1109.6	189.18	163.61	3.1699
					111	1105.4	190.83	165.16	3.1848
					112	1101.1	192.47	166.71	3.1995
					113	1096.9	194.11	168.25	3.2141
					114	1092.6	195.75	169.78	3.2285
					115	1088.3	197.38	171.31	3.2428
					116	1084.1	199.01	172.84	3.2569
					117	1079.8	200.63	174.35	3.2708
					118	1075.5	202.24	175.86	3.2845
					119	1071.2	203.86	177.37	3.2981
					120	1066.9	205.46	178.87	3.3116
					121	1062.6	207.06	180.36	3.3248
					122	1058.3	208.66	181.85	3.3380
					123	1054.0	210.25	183.33	3.3510
					124	1049.7	211.83	184.80	3.3638
					125	1045.4	213.41	186.27	3.3765
					126	1041.0	214.99	187.74	3.3890
					127	1036.7	216.56	189.19	3.4015
					128	1032.3	218.13	190.65	3.4138
					129	1028.0	219.69	192.10	3.4259
					130	1023.6	221.26	193.54	3.4380
					131	1019.3	222.82	194.98	3.4500
					132	1014.9	224.37	196.42	3.4618
					133	1010.5	225.93	197.85	3.4736
					134	1006.1	227.49	199.29	3.4852
					135	1001.7	229.05	200.72	3.4968
					136	997.27	230.61	202.16	3.5083
					137	992.84	232.17	203.60	3.5198
					138	988.40	233.74	205.04	3.5312
					139	983.96	235.31	206.48	3.5426
					140	979.50	236.89	207.93	3.5539
					141	975.03	238.41	209.31	3.5647
					142	970.55	239.94	210.70	3.5755
					143	966.06	241.47	212.10	3.5863
					144	961.55	243.02	213.51	3.5971
					145	957.04	244.58	214.94	3.6079
					146	952.51	246.16	216.37	3.6187
					147	947.97	247.75	217.82	3.6296
					148	943.41	249.36	219.29	3.6406
					149	938.85	250.99	220.77	3.6515
					150	934.27	252.63	222.26	3.6626
					151	929.68	254.28	223.76	3.6736
					152	925.07	255.94	225.27	3.6846
					153	920.45	257.58	226.76	3.6954
					154	915.82	259.17	228.19	3.7058
					155	911.17	260.53	229.39	3.7147
86	1215.2	150.32	126.98	2.7727	156	906.51	262.28	230.98	3.7259
87	1205.3	151.47	127.93	2.7856	157	901.84	264.02	232.56	3.7370
88	1201.3	153.05	129.43	2.8037	158	897.15	265.76	234.14	3.7481
89	1197.2	154.64	130.94	2.8216	159	892.44	267.50	235.71	3.7591
90	1193.1	156.24	132.46	2.8395	160	887.73	269.24	237.28	3.7700

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
161	883.00	270.98	238.85	3.7808	231	551.15	393.30	341.82	4.4120
162	878.25	272.72	240.42	3.7916	232	547.24	394.96	343.11	4.4192
163	873.49	274.46	241.98	3.8023	233	543.38	396.61	344.40	4.4263
164	868.72	276.20	243.54	3.8130	234	539.56	398.26	345.68	4.4334
165	863.93	277.94	245.10	3.8235	235	535.78	399.90	346.95	4.4404
166	859.13	279.68	246.66	3.8340	236	532.05	401.54	348.22	4.4474
167	854.31	281.42	248.21	3.8445	237	528.36	403.17	349.47	4.4542
168	849.48	283.17	249.77	3.8549	238	524.71	404.80	350.73	4.4611
169	844.64	284.91	251.32	3.8652	239	521.11	406.41	351.97	4.4679
170	839.78	286.65	252.87	3.8755	240	517.55	408.03	353.21	4.4746
171	834.91	288.39	254.41	3.8858	241	514.03	409.63	354.44	4.4813
172	830.03	290.14	255.96	3.8959	242	510.55	411.23	355.66	4.4879
173	825.14	291.89	257.50	3.9061	243	507.12	412.82	356.88	4.4945
174	820.23	293.64	259.05	3.9161	244	503.72	414.41	358.09	4.5010
175	815.32	295.38	260.59	3.9262	245	500.37	415.99	359.29	4.5075
176	810.39	297.14	262.13	3.9361	246	497.06	417.56	360.49	4.5139
177	805.45	298.89	263.66	3.9461	247	493.80	419.13	361.68	4.5202
178	800.50	300.64	265.20	3.9559	248	490.57	420.69	362.86	4.5265
179	795.54	302.40	266.73	3.9658	249	487.38	422.25	364.04	4.5328
180	790.58	304.15	268.27	3.9756	250	484.23	423.80	365.21	4.5390
181	785.60	305.91	269.80	3.9853	251	481.12	425.34	366.37	4.5452
182	780.62	307.67	271.33	3.9950	252	478.05	426.88	367.53	4.5513
183	775.63	309.43	272.86	4.0047	253	475.02	428.41	368.68	4.5573
184	770.64	311.20	274.38	4.0143	254	472.03	429.93	369.83	4.5633
185	765.64	312.96	275.91	4.0238	255	469.07	431.45	370.97	4.5693
186	760.64	314.73	277.43	4.0334	256	466.15	432.96	372.10	4.5752
187	755.63	316.50	278.95	4.0428	257	463.27	434.47	373.23	4.5811
188	750.63	318.26	280.47	4.0523	258	460.42	435.97	374.35	4.5869
189	745.62	320.03	281.98	4.0617	259	457.61	437.47	375.47	4.5927
190	740.61	321.81	283.50	4.0710	260	454.84	438.96	376.58	4.5985
191	735.60	323.58	285.01	4.0803	261	452.10	440.44	377.68	4.6041
192	730.60	325.35	286.52	4.0896	262	449.39	441.92	378.78	4.6098
193	725.60	327.12	288.02	4.0988	263	446.72	443.39	379.88	4.6154
194	720.61	328.90	289.53	4.1079	264	444.08	444.85	380.97	4.6210
195	715.62	330.67	291.03	4.1171	265	441.46	446.31	382.05	4.6265
196	710.64	332.45	292.53	4.1262	266	438.90	447.77	383.13	4.6320
197	705.66	334.22	294.02	4.1352	267	436.36	449.22	384.20	4.6374
198	700.70	336.00	295.51	4.1442	268	433.85	450.66	385.27	4.6428
199	695.75	337.78	297.00	4.1531	269	431.37	452.10	386.33	4.6482
200	690.81	339.55	298.48	4.1620	270	428.93	453.54	387.39	4.6535
201	685.89	341.32	299.96	4.1709	271	426.51	454.97	388.45	4.6588
202	680.98	343.10	301.44	4.1797	272	424.12	456.39	389.50	4.6640
203	676.10	344.87	302.91	4.1884	273	421.76	457.81	390.54	4.6692
204	671.22	346.64	304.37	4.1971	274	419.43	459.22	391.58	4.6744
205	666.37	348.41	305.84	4.2058	275	417.13	460.63	392.61	4.6795
206	661.54	350.18	307.29	4.2144	276	414.85	462.03	393.65	4.6846
207	656.74	351.95	308.75	4.2229	277	412.60	463.43	394.67	4.6897
208	651.96	353.71	310.20	4.2314	278	410.38	464.83	395.69	4.6947
209	647.20	355.47	311.64	4.2399	279	408.19	466.22	396.71	4.6997
210	642.47	357.23	313.08	4.2483	280	406.02	467.60	397.73	4.7046
211	637.77	358.99	314.51	4.2567	281	403.88	468.98	398.74	4.7096
212	633.09	360.75	315.93	4.2649	282	401.76	470.36	399.74	4.7145
213	628.45	362.50	317.35	4.2732	283	399.67	471.73	400.74	4.7193
214	623.84	364.25	318.77	4.2814	284	397.60	473.10	401.74	4.7241
215	619.26	365.99	320.18	4.2895	285	395.55	474.46	402.73	4.7289
216	614.72	367.73	321.58	4.2976	286	393.53	475.82	403.72	4.7337
217	610.21	369.47	322.98	4.3056	287	391.54	477.17	404.71	4.7384
218	605.74	371.20	324.37	4.3136	288	389.56	478.52	405.69	4.7431
219	601.30	372.93	325.75	4.3215	289	387.61	479.87	406.67	4.7478
220	596.90	374.66	327.13	4.3294	290	385.68	481.21	407.65	4.7524
221	592.54	376.38	328.50	4.3372	291	383.77	482.55	408.62	4.7570
222	588.21	378.09	329.86	4.3449	292	381.89	483.88	409.59	4.7616
223	583.93	379.80	331.22	4.3526	293	380.02	485.21	410.56	4.7661
224	579.69	381.51	332.57	4.3602	294	378.18	486.54	411.52	4.7707
225	575.49	383.21	333.91	4.3678	295	376.35	487.86	412.48	4.7751
226	571.32	384.90	335.25	4.3753	296	374.55	489.18	413.43	4.7796
227	567.21	386.59	336.57	4.3828	297	372.77	490.49	414.39	4.7840
228	563.13	388.28	337.90	4.3902	298	371.00	491.81	415.33	4.7885
229	559.09	389.96	339.21	4.3975	299	369.26	493.11	416.28	4.7928
230	555.10	391.63	340.52	4.4048	300	367.53	494.42	417.23	4.7972

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
					91	1192.2	159.02	133.53	2.8515
					92	1188.2	160.64	135.05	2.8691
					93	1184.1	162.25	136.58	2.8866
					94	1180.0	163.88	138.12	2.9040
					95	1175.9	165.51	139.66	2.9213
					96	1171.8	167.15	141.21	2.9384
					97	1167.7	168.79	142.76	2.9554
					98	1163.6	170.43	144.31	2.9723
					99	1159.5	172.08	145.86	2.9890
					100	1155.4	173.73	147.42	3.0056
					101	1151.3	175.38	148.98	3.0220
					102	1147.1	177.04	150.54	3.0383
					103	1143.0	178.69	152.10	3.0544
					104	1138.8	180.35	153.65	3.0704
					105	1134.7	182.00	155.21	3.0863
					106	1130.5	183.65	156.76	3.1019
					107	1126.4	185.30	158.32	3.1174
					108	1122.2	186.95	159.87	3.1328
					109	1118.0	188.60	161.41	3.1480
					110	1113.9	190.25	162.95	3.1630
					111	1109.7	191.89	164.49	3.1778
					112	1105.5	193.52	166.03	3.1925
					113	1101.3	195.16	167.56	3.2070
					114	1097.1	196.79	169.08	3.2214
					115	1092.9	198.41	170.60	3.2356
					116	1088.7	200.03	172.11	3.2496
					117	1084.6	201.64	173.61	3.2634
					118	1080.4	203.25	175.11	3.2771
					119	1076.1	204.85	176.61	3.2907
					120	1071.9	206.45	178.09	3.3040
					121	1067.7	208.04	179.57	3.3172
					122	1063.5	209.63	181.05	3.3303
					123	1059.3	211.21	182.52	3.3432
					124	1055.1	212.79	183.98	3.3560
					125	1050.8	214.36	185.43	3.3686
					126	1046.6	215.93	186.88	3.3811
					127	1042.3	217.49	188.32	3.3934
					128	1038.1	219.05	189.76	3.4056
					129	1033.8	220.60	191.20	3.4177
					130	1029.6	222.15	192.63	3.4297
					131	1025.3	223.70	194.05	3.4416
					132	1021.0	225.25	195.47	3.4533
					133	1016.7	226.79	196.89	3.4650
					134	1012.4	228.34	198.31	3.4766
					135	1008.2	229.88	199.73	3.4881
					136	1003.8	231.43	201.15	3.4995
					137	999.54	232.98	202.57	3.5109
					138	995.22	234.54	203.99	3.5222
					139	990.89	236.10	205.42	3.5334
					140	986.55	237.66	206.85	3.5447
					141	982.21	239.17	208.22	3.5554
					142	977.85	240.68	209.59	3.5660
					143	973.49	242.20	210.97	3.5767
					144	969.12	243.73	212.36	3.5874
					145	964.74	245.27	213.76	3.5981
					146	960.35	246.83	215.18	3.6088
					147	955.95	248.41	216.61	3.6196
					148	951.54	250.00	218.05	3.6304
					149	947.12	251.61	219.51	3.6413
					150	942.69	253.23	220.99	3.6522
					151	938.25	254.87	222.47	3.6631
					152	933.80	256.50	223.95	3.6739
					153	929.33	258.12	225.42	3.6846
					154	924.86	259.69	226.82	3.6949
					155	920.38	261.03	228.00	3.7036
86	1219.1	151.56	126.62	2.7676	156	915.89	262.75	229.57	3.7147
87	1208.3	152.66	127.51	2.7800	157	911.38	264.48	231.12	3.7257
88	1204.3	154.24	129.00	2.7980	158	906.87	266.20	232.68	3.7366
89	1200.3	155.83	130.50	2.8160	159	902.34	267.91	234.23	3.7475
90	1196.3	157.42	132.01	2.8338	160	897.80	269.63	235.77	3.7582

TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)	TEMPER-ATURE (K)	DENSITY X(1000) (G/CC)	ENTHALPY (J/G)	INTERNAL ENERGY (J/G)	ENTROPY (J/G-K)
161	893.26	271.34	237.31	3.7689	231	575.69	391.15	338.34	4.3872
162	888.70	273.06	238.85	3.7795	232	571.85	392.79	339.63	4.3943
163	884.13	274.77	240.39	3.7901	233	568.04	394.42	340.91	4.4013
164	879.55	276.48	241.92	3.8005	234	564.27	396.05	342.18	4.4083
165	874.96	278.20	243.46	3.8109	235	560.54	397.68	343.45	4.4152
166	870.36	279.91	244.98	3.8213	236	556.85	399.30	344.71	4.4221
167	865.74	281.62	246.51	3.8316	237	553.19	400.92	345.97	4.4289
168	861.12	283.33	248.03	3.8418	238	549.57	402.53	347.22	4.4357
169	856.49	285.05	249.55	3.8520	239	545.99	404.13	348.46	4.4424
170	851.85	286.76	251.07	3.8621	240	542.45	405.73	349.69	4.4491
171	847.19	288.47	252.59	3.8721	241	538.95	407.32	350.92	4.4557
172	842.53	290.18	254.11	3.8821	242	535.48	408.91	352.15	4.4623
173	837.86	291.90	255.62	3.8920	243	532.05	410.50	353.36	4.4688
174	833.18	293.61	257.13	3.9019	244	528.66	412.07	354.57	4.4753
175	828.50	295.33	258.64	3.9117	245	525.30	413.65	355.78	4.4818
176	823.80	297.04	260.14	3.9215	246	521.98	415.21	356.98	4.4881
177	819.10	298.76	261.65	3.9313	247	518.70	416.77	358.17	4.4945
178	814.39	300.48	263.15	3.9409	248	515.46	418.33	359.36	4.5008
179	809.67	302.20	264.65	3.9506	249	512.25	419.88	360.54	4.5070
180	804.95	303.92	266.15	3.9601	250	509.08	421.42	361.71	4.5132
181	800.22	305.64	267.65	3.9697	251	505.95	422.96	362.88	4.5193
182	795.48	307.36	269.15	3.9792	252	502.85	424.50	364.05	4.5254
183	790.74	309.08	270.64	3.9886	253	499.78	426.02	365.20	4.5315
184	786.00	310.81	272.13	3.9980	254	496.75	427.55	366.35	4.5375
185	781.25	312.53	273.62	4.0073	255	493.76	429.06	367.50	4.5434
186	776.51	314.26	275.11	4.0166	256	490.80	430.58	368.64	4.5494
187	771.76	315.98	276.59	4.0259	257	487.88	432.08	369.78	4.5552
188	767.01	317.71	278.08	4.0351	258	484.99	433.58	370.91	4.5611
189	762.25	319.44	279.56	4.0443	259	482.13	435.08	372.03	4.5668
190	757.50	321.17	281.04	4.0534	260	479.30	436.57	373.15	4.5726
191	752.76	322.90	282.51	4.0625	261	476.51	438.05	374.26	4.5783
192	748.01	324.63	283.99	4.0715	262	473.75	439.53	375.37	4.5839
193	743.27	326.36	285.46	4.0805	263	471.03	441.01	376.47	4.5896
194	738.53	328.09	286.93	4.0894	264	468.33	442.48	377.57	4.5951
195	733.80	329.82	288.39	4.0983	265	465.67	443.94	378.66	4.6007
196	729.07	331.55	289.86	4.1072	266	463.03	445.40	379.75	4.6062
197	724.35	333.28	291.32	4.1160	267	460.43	446.85	380.83	4.6116
198	719.64	335.01	292.77	4.1248	268	457.86	448.30	381.91	4.6170
199	714.94	336.74	294.23	4.1335	269	455.31	449.75	382.99	4.6224
200	710.25	338.47	295.68	4.1422	270	452.80	451.19	384.05	4.6278
201	705.57	340.21	297.12	4.1508	271	450.32	452.62	385.12	4.6331
202	700.90	341.94	298.57	4.1594	272	447.86	454.05	386.18	4.6383
203	696.25	343.66	300.01	4.1679	273	445.43	455.47	387.23	4.6436
204	691.61	345.39	301.44	4.1764	274	443.03	456.89	388.28	4.6487
205	686.99	347.12	302.87	4.1849	275	440.66	458.31	389.33	4.6539
206	682.39	348.85	304.30	4.1933	276	438.32	459.72	390.37	4.6590
207	677.80	350.57	305.72	4.2016	277	436.00	461.13	391.41	4.6641
208	673.23	352.30	307.14	4.2099	278	433.70	462.53	392.44	4.6692
209	668.69	354.02	308.56	4.2182	279	431.44	463.93	393.47	4.6742
210	664.16	355.74	309.97	4.2264	280	429.20	465.32	394.49	4.6792
211	659.66	357.45	311.37	4.2346	281	426.98	466.71	395.52	4.6841
212	655.18	359.17	312.77	4.2427	282	424.79	468.09	396.53	4.6890
213	650.73	360.88	314.17	4.2507	283	422.63	469.47	397.55	4.6939
214	646.30	362.59	315.56	4.2587	284	420.48	470.85	398.55	4.6988
215	641.90	364.30	316.95	4.2667	285	418.36	472.22	399.56	4.7036
216	637.52	366.01	318.33	4.2746	286	416.27	473.58	400.56	4.7084
217	633.17	367.71	319.70	4.2825	287	414.20	474.95	401.56	4.7131
218	628.86	369.41	321.07	4.2903	288	412.15	476.31	402.55	4.7179
219	624.57	371.10	322.44	4.2981	289	410.12	477.66	403.54	4.7226
220	620.31	372.80	323.79	4.3058	290	408.12	479.01	404.53	4.7272
221	616.09	374.49	325.15	4.3134	291	406.14	480.36	405.52	4.7319
222	611.89	376.17	326.49	4.3210	292	404.17	481.70	406.50	4.7365
223	607.73	377.85	327.83	4.3286	293	402.23	483.04	407.47	4.7411
224	603.61	379.53	329.17	4.3361	294	400.31	484.38	408.45	4.7456
225	599.51	381.20	330.50	4.3435	295	398.42	485.71	409.42	4.7501
226	595.45	382.87	331.82	4.3509	296	396.54	487.04	410.38	4.7546
227	591.43	384.54	333.14	4.3583	297	394.68	488.37	411.35	4.7591
228	587.44	386.19	334.45	4.3656	298	392.84	489.69	412.31	4.7635
229	583.49	387.85	335.75	4.3728	299	391.02	491.01	413.27	4.7680
230	579.57	389.50	337.05	4.3800	300	389.22	492.32	414.22	4.7723